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ABSTRACT

This is the second bulletin in a series dealing with international issues in language instruction in the military. Articles include: (1) "L'Enseignement des langues (etrangeres) dans les Forces Armees Belges," (2) "La Morphologic de la Conjugaison ecrite simple en francais contemporain: evantail des cas et rendement des categories," (3) "Data Processing Systems and Language Teaching," (4) "Le Centre de Langues et Etudes Etrangeres Militaires de l'Armee de Terre Francaise," (5) "Unification of Foreign Language Proficiency Levels and English Language Tests in the Italian Armed Forces," (6) "The Effectiveness of a Classroom Lab Instructional System," and (7) "Proces-verbal de la reunion linguistique bilaterale franco-allemande." Articles 1, 2 and 4 are in French with English summaries; Articles 3, 5 and 6 are in English with French summaries. (RL)

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EDITORIAL

The second issue of the BILC Bulletin is a transitional one. It contains material which directly continues the line taken in the initial issue, the object of which was to sketch in broad outline the organisation of language training in the member countries. Since the aim of BILC is to disseminate information of a pragmatic or a research character, which will be readily utilisable on the workshop floor or indicative of lines of experiment, we are pleased to note that a number of our contributions are breaking fresh ground in this area.

We hope that future numbers of the Bulletin will continue in this strain, so augmenting the effective work of the organisation, carried out in our conferences.

It will be recalled that when BILC was set up in 1966 it was explicitly stated that the corporate activities of the organisation were in no way intended to impede the bilateral or multilateral contacts between individual members. As an earnest that these contacts are still flourishing, we have included in this issue mention of two instances of such contact.

In February 1967, at a meeting between the Federal Republic of Germany and France, arrangements were formalised for continuing cooperation between the two countries in the language field. It was unfortunate that the protocol of the meeting was not available for publication in issue No. 1, but we have nevertheless thought it most apposite to print the French version of the two parallel texts (in French and German) to give an indication of the scope of the cooperation which is in fact undertaken between individual member countries.

We have also drawn attention to the issue of a British reprint of the "Handwörterbuch für die Bundeswehr: Englisch-Deutsch", originally issued by the Language Service of the Bundeswehr. It is also hoped that we shall have to find space in future issues for further references of this kind.

Le deuxième numéro du Bulletin du Bureau de coordination linguistique internationale (BILC) est du type transitionnel. Il contient des textes qui suivent le modèle tracé dans le premier numéro, dont le but était d'exposer dans ses grandes lignes l'organisation de l'enseignement linguistique dans les nations membres du BILC. Puisque le BILC a pour objet la dissémination d'informations soit pragmatiques, soit à titre de recherches, lesquelles seront faciles à utiliser dans l'atelier, pour ainsi dire, ou bien qui indiqueront des lignes d'expérimentation, nous sommes heureux de constater que bon nombre des contributions reçues font oeuvre de pionnier dans ce domaine.

Nous espérons que les numéros futurs du Bulletin continueront dans ce sens; c'est ainsi que sera augmenté le travail efficace de l'organisme, travail qui est mis à exécution au cours de nos conférences.

On se rappellera que lorsque le BILC fut établi en 1966 il fut catégoriquement déclaré que les activités collectives de l'organisme n'étaient aucunement conçues dans l'intention d'entraver des contacts bilatéraux ou multilatéraux pris par les membres individuels. Pour prouver que ces contacts prospèrent toujours, nous avons fait mention dans ce numéro de deux exemples d'une telle collaboration.

En février 1967, lors d'une réunion tenue à Paris entre la République Fédérale d'Allemagne et la France, des mesures furent formellement prises pour continuer la coopération entre les deux nations dans le domaine linguistique. Malheureusement, le procès-verbal de la réunion ne put être publié dans le premier numéro du Bulletin, mais nous avons jugé très approprié d'imprimer ici le texte en français (il y a deux textes parallèles et d'une valeur égale en français et en allemand) pour donner une indication de l'étendue de la coopération qui est en fait réalisée par les nations membres.

Nous avons également fait remarquer la parution d'un nouveau tirage britannique du dictionnaire "Handwörterbuch für die Bundeswehr: Englisch-Deutsch", publié initialement par le Service des Langues de la Bundeswehr. Nous espérons aussi pouvoir signaler d'autres faits semblables dans les numéros futurs.

L'ENSEIGNEMENT DES LANGUES (ETRANGERES) DANS LES FORCES ARMEES BELGES

C'est intentionnellement que nous avons placé le mot "ETRANGERES" entre parenthèses, dans le titre. En effet, les belges considèrent comme "nationales" les langues qui sont le plus couramment utilisées sur leur territoire, à savoir le français et le néerlandais. Cette situation est le résultat de plusieurs siècles d'histoire.

1. LE BILINGUISME

La BELGIQUE est légalement bilingue (français et néerlandais) et, depuis 1919, effectivement trilingue (français, néerlandais, allemand). En effet, depuis le rattachement des cantons de l'Est au territoire belge au lendemain de la première guerre mondiale, la langue allemande y est officiellement utilisée dans l'enseignement, l'administration et la justice. Toutefois, l'allemand n'étant utilisé que par une faible minorité (la Force Terrestre a un bataillon d'infanterie partiellement d'expression allemande dans lequel servent la plupart des jeunes Belges des cantons de l'Est), nous n'esquisserons que le problème des deux langues nationales légales, c'est-à-dire le français et le néerlandais.

Une législation, qui date de l'entre-deux-guerres et qui mit plus d'un siècle à voir le jour, prescrit aux officiers des forces armées et à certains fonctionnaires de l'Etat et de certaines Provinces et Communes, de posséder la connaissance effective de leur seconde langue nationale, la première étant évidemment leur langue maternelle.
Pour en fournir la preuve, l'officier doit subir deux examens, le premier, avant d'être nommé sous-lieutenant, le second, avant d'accéder au grade d'officier supérieur. Seuls les officiers sont "légalement" bilingues et peuvent de ce fait être appelés à servir dans une unité de n'importe quel régime linguistique. Par contre, sous-officiers, caporaux et soldats sont "légalement" unilingues et incorporés dans une

unité ou formation de leur propre régime linguistique. Ceci ne les empêche pas d'être très souvent bilingues, voir plurilingues.

En vue des examens susmentionnés, l'enseignement de la seconde langue nationale est dispensé par les écoles interforces: Ecole Royale des Cadets, Ecole Royale Militaire et Ecole de Préparation à la Sous-Lieutenance, ainsi que par le Centre Linguistique de l'Ecole Royale Militaire pour les candidats au titre d'officier supérieur. Ce centre prépare également des candidats à l'épreuve de connaissance approfondie de la seconde langue nationale, connaissance exigée pour devenir professeur dans un établissement militaire supérieur.

Sans entrer dans plus de détails, remarquons que dans le cadre des forces armées tous les officiers sont "légalement" bilingues, que beaucoup d'entre eux ont fourni ou se préparent à fournir la preuve de la connaissance approfondie de leur seconde langue nationale et que bon nombre de sous-officiers d'élite sont effectivement bilingues.

Le militaire belge est donc dans une situation linguistique de base sensiblement différente de celle que connaît par exemple le militaire britannique qui doit apprendre l'arabe en vue d'accomplir une mission au Moyen-Orient.

Pour l'enseignement des langues nationales, toutes les écoles déjà mentionnées possèdent des laboratoires de langues, équipés de cabines et de matériels audio-visuels devenus désormais traditionnels dans la plupart des pays. A titre d'exemple, l'installation du Centre Linguistique de l'Ecole Royale Militaire comprend deux laboratoires qui totalisent 90 cabines qui peuvent être utilisées simultanément par quatre classes différentes. Toutes les installations prévues pour l'enseignement des deux langues nationales servent également à l'enseignement des langues étrangères.

2. LES LANGUES ETRANGERES

a. Quelles langues?

Même si l'allemand est la langue véhiculaire de quelques dizaines de milliers de Belges, pour les autres, il constitue une langue étrangère. Dans les forces armées, l'enseignement des langues étrangères

se limite à l'anglais, à l'allemand et au russe. Ajoutées au français et au néerlandais, ces trois langues répondent aux besoins de la défense nationale.

Il convient toutefois de remarquer que la langue anglaise prime et que les cours d'anglais sont ceux qui sont suivis par le plus grand nombre d'élèves. A titre d'exemple, les élèves de l'Ecole Royale Militaire sont obligés de suivre le cours d'anglais (120 heures réparties sur 3 ans) à moins qu'ils ne fournissent, à l'entrée à l'école, par la réussite de tests et d'interviews, la preuve qu'ils possèdent une solide connaissance de cette langue; les mêmes conditions sont imposées à l'Ecole de Guerre pour un cours de 40 heures réparties sur 6 mois. L'anglais est la seule langue étrangère enseignée à l'Ecole de Préparation à la Sous-Lieutenance Interforces et à l'Ecole des Administrateurs Militaires. L'Ecole d'Artillerie Anti-Aérienne dispense des cours d'américain au personnel spécialisé désigné pour effectuer des stages ou suivre des cours aux USA. L'installation récente en BELGIQUE de l'OTAN et du SHAPE a nécessité l'organisation de cours d'anglais au profit du personnel chargé notamment de la sécurité des installations.

b. <u>A qui?</u>

Il y a d'une part des élèves réguliers qui suivent les cours d'une des écoles militaires et d'autre part des élèves libres, c'est-à-dire les militaires qui décident de suivre en dehors de leur service, un cours de leur choix dans un des laboratoires de langues. Il y a enfin les militaires belges et leurs familles stationnés avec le 1(BE)Corps en REPUBLIQUE FEDERALE ALLEMANDE qui suivent les cours de langues dispensés dans sept centres linguistiques installés dans les garnisons belges.

c. <u>Par qui?</u>

Le corps enseignant, outre quelques professeurs civils, se compose d'officiers choisis en raison de leurs titres académiques ou de leur compétence dans une ou plusieurs langues étrangères.

d. <u>Où?</u>

Les langues étrangères sont enseignées dans dix-neuf établissements, dont douze sont situés en BELGIQUE et sept en REPUBLIQUE FEDERALE ALLEMANDE.

En BELGIQUE, nous trouvons:

- les six écoles interforces:

  - l'Ecole Royale des Cadets, sections de Laeken et de Lierre,
  - l'Ecole Royale Militaire, à Bruxelles,
  - l'Ecole de Préparation à la Sous-Lieutenance, à Bruxelles,
  - l'Ecole de Guerre, à Bruxelles,
  - l'Ecole des Administrateurs Militaires, à Bruxelles;

- l'Ecole d'Artillerie Anti-Aérienne, à Lombardsijde, seulement pour un cours d'américain;

- les trois écoles et centres de la Force Aérienne, à Brustem, Saffraenberg et Goetsenhoven;

- les deux centres de la Force Navale, à Oostende et Brugge.

En ALLEMAGNE, les centres sont situés à Weiden (Cologne), Spich, Soest, Siegen, Düren, Bensberg et Kassel.

3. LE POINT DE LA SITUATION

La dernière décennie a amené de profondes transformations dans l'enseignement des langues. Cet enseignement, qui trop souvent se faisait ex cathedra, ne parvenait que rarement à éveiller la participation des élèves. Il produisait dès lors de médiocres résultats et amenait à une connaissance passive de la langue enseignée. L'avènement du laboratoire de langues et son utilisation enthousiaste par des enseignants dynamiques et des enseignés intéressés ont largement contribué à l'acquisition par l'étudiant d'une connaissance active des langues étrangères.

Les forces belges ont largement participé à ce mouvement. Aujourd'hui, elles ont atteint le stade où, après une mise en place de moyens, il est nécessaire de procéder à une certaine centralisation. Celle-ci est dictée par des impératifs d'économie et de rendement optimal des professeurs, des installations et du matériel. Il s'agit en fait de discipliner les moyens afin de les rendre plus efficaces et de décharger ainsi certaines écoles et notamment l'Ecole Royale Militaire de leur responsabilité en ce domaine.

SUMMARY

Belgium is legally bilingual in French and Dutch (plus German for a very small minority). All officers of the armed forces must possess an "effective" knowledge of their second national language, the first one being of course their mother tongue. They can be appointed to a French- or a Dutch-speaking unit, whereas NCOs are posted only to units where their mother tongue is spoken, even if they are bi- or multilingual. Officers must sit an examination in their second language before commissioning, and another before promotion to field officer. They prepare for these examinations at the interservice military schools, which use modern equipment to teach national and foreign languages.

English, German and Russian are taught to regular students in military schools and Academies, and in 19 teaching centres and laboratories to voluntary students, military personnel and their families stationed in Germany, mostly by officers competent in one or more foreign languages.

The last decade brought forth great changes in the teaching of foreign languages, and the Belgian forces have taken an important part in this movement. Today they have reached a point where it is necessary to rationalise the complete outfit and to proceed to some centralisation, in order to realise a greater economy of means (installations, equipment and teachers) and better services.

Canada

LA MORPHOLOGIE DE LA CONJUGAISON ECRITE SIMPLE EN FRANÇAIS CONTEMPORAIN: éventail des cas et rendement des catégories

par

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1.1.1.

La docimologie, ou science de la mesure, lorsqu'elle est appliquée à une langue seconde, suppose, au préalable, une description complète et systématique de celle-ci: s'il s'agit, par exemple, de faire un test de connaissance générale du français, il est nécessaire qu'on ait une vue d'ensemble de tous les éléments contenus dans le français, de sorte que, à partir d'une description intégrale et systématique, on puisse en arriver à déterminer quels sont les éléments à retenir, pour fins de mesure.

1.1.2.

Ainsi, à l'intérieur de chaque niveau du français - phonologique, morphologique, syntaxique - il importera d'effectuer des classements, d'établir le système, et de choisir les éléments représentatifs dont la vérification devrait suffire à inférer que la connaissance de ceux-ci suppose la connaissance des autres: le test, à cause de ses limites, ne peut contenir qu'un nombre restreint d'éléments à vérifier. De toutes façons, une vérification complète serait à la fois impossible et inutile. La mesure est basée sur un principe d'économie, laquelle repose sur une statistique de l'ensemble.

1.1.3.

C'est dans cette optique que nous avons fait nos travaux au Bureau de Recherche des Ecoles de langues, et le présent article a pour but de

présenter l'un des classements effectués en morphologie: celui des verbes. Avant toutefois de parler des résultats du travail, il convient d'indiquer les sources et de préciser les critères qui ont servi aux classements.

1.2.1.

Notre classement s'est fait exclusivement sur le plan de la langue écrite et cela pour deux raisons: d'abord nous sommes partis du principe que l'écrit contient l'oral; c'est-à-dire, tout élément oral pourra se retrouver dans l'écrit sous une forme plus ou moins équivalente; de sorte que, une fois le système de la conjugaison écrite établi, le système oral s'établira à son tour par inférence et transposition de l'écrit.

1.2.2.

D'autre part, les études ou les manuels traitant du français écrit sont beaucoup plus nombreux et beaucoup plus accessibles que les travaux effectués en français oral. De sorte que, pour une description globale du système de la conjugaison, l'écrit se prêtait mieux. Une fois les cas relevés et classés, on peut établir le transfert: "chanter", "manger" et "commencer", qui sont 3 catégories de conjugaison en français écrit, à cause de particularités orthographiques, seront classés évidemment sous une seule catégorie dans le système oral. Par contre, des verbes comme "interpeller" et "mêler", qui se conjuguent dans l'écrit sur le modèle régulier "parler" seront plutôt distribués, dans le système oral, à des catégories différentes, à cause de changements vocaliques dont la graphie ne rend pas compte: interpeller aura une opposition ɛ /ə, mêler aura une opposition ɛ/e :

J'interpelle	/ ɛ /	Nous interpelons	/ ə /
Je mêle	/ ɛ /	Nous mêlons	/ e /

De même, un verbe comme "frustrer", qui se conjugue lui aussi dans l'écrit comme "parler" se conjuguera oralement d'une autre façon, à cause d'un schwa obligatoire au futur et au conditionnel; ainsi:

Je chantais	/ ɛ /	Je chanterais	/ rɛ /
Je frustrais	/ ɛ /	Je frustrerais	/erɛ /

mais ces transferts seront faits à partir des cas déjà relevés dans l'écrit.

1.2.3.

Pour décrire la conjugaison écrite, nous avons donc consulté les instruments suivants: grammaires normatives (Grévisse, Larousse, Galichet, Gal, Laurence, etc.); dictionnaires usuels (Larousse en 10 volumes et 3 volumes, Quillet, Littré); dictionnaires des difficultés (Georgin, Beistre); et monographies sur le verbe (du type Bescherelle ou "l'Art de Conjuguer les 8 000 verbes usuels"). Un mot sur ces manuels traditionnels: les grammaires, qui semblent toutes se copier l'une l'autre, ne donnent pas du verbe un tableau cohérent. Elles y introduisent des remarques étymologiques qui obscurcissent le système morphologique de la conjugaison contemporaine; de plus, il y a contradiction d'une grammaire à l'autre; par exemple, pour les verbes défectifs, certains temps sont permis ou rejetés au gré des auteurs. Quant aux dictionnaires, il y a incohérence dans le renvoi des verbes (classés alphabétiquement) à leur type de conjugaison. Deux verbes qui se conjuguent de la même façon seront référés à 2 modèles; ou bien un des deux verbes seulement est référé à 2 modèles; ou bien un des deux verbes seulement est référé au modèle et l'autre ne contient aucune référence de conjugaison. Ex: "jeter" et "voleter". Quant aux dictionnaires des difficultés, les vraies difficultés sont absentes et surtout les difficultés varient d'un auteur à l'autre. Enfin, le fameux manuel Bescherelle, tant employé dans les classes, tant vendu, comporte lui aussi des manques sérieux, que réparent un peu sa présentation claire et sa consultation facile. Les lacunes sont de deux ordres: d'abord les 8 000 verbes se réduisent, après un compte minutieux, à 5656 (il contient donc, en liste alphabétique, 2344 verbes de moins qu'il n'annonce, soit plus d'1/4). De plus, et c'est plus grave, il établit des catégories différentes pour des verbes qui se conjuguent de la même façon; exemple: "parler", "créer", "apprécier", d'une part; "peindre", "craindre", "joindre", d'autre part. Il s'agit exactement de s'entendre sur la définition de catégories de la conjugaison. C'est ce que nous définirons un peu plus loin. Bref, ces manuels de référence, qui restent quand même fort utiles, comportent des lacunes et des incohérences, qui rendent la consultation souvent difficile, et font perdre de vue le système.

1.2.4.

C'est pourquoi, comme nous voulions nous donner à la fois un instrument de consultation claire, et un système complet du verbe, nous avons

procédé à un reclassement des cas de conjugaison donnés dans les grammaires traditionnelles, et cela à partir de critères strictement morphologiques.

1.2.4.1.

Puisqu'il s'agit de la morphologie du verbe, il convient évidemment de définir ce que nous entendons par verbe: dans notre travail, un verbe est "une unité lexicale simple qui se conjugue", c'est-à-dire, qui reçoit une série de morphèmes pour marquer, sur le plan sémantique, des différences ou des oppositions de personnes, de temps, et de modes. Ainsi, nous ne nous sommes pas occupés des syntagmes verbaux, ni des cas d'aspects, ni des cas de suffixation concernant la formation des verbes (à partir de substantifs ou d'adjectifs, par exemple). Nous avons donc étudié les verbes sur le strict plan de la conjugaison écrite simple.

1.2.4.2.

La conjugaison repose sur une dichotomie, ou, une opposition radical-désinence; en gros, le radical pourra s'appeler "lexème", c'est-à-dire, ce qui contient la charge sémantique du verbe, et la désinence, "morphème" (de conjugaison). Ainsi, dans "nous chantions", chant est une suite de graphes dont la combinaison fait le lexème, et ions, le morphème. Dans plusieurs cas, la délimitation de la frontière entre le lexème et le morphème n'est pas claire, et une délimitation bien précise est très importante pour déterminer les differences de catégories entre les verbes. Autrement dit, il fallait délimiter exactement, parmi les graphes, ceux qui appartiennent au radical et ceux qui appartiennent à la désinence. Tout le tableau des catégories verbales des conjugaisons, ou des paradigmes, repose sur la cohérence de la relation radical-désinence. Dans un verbe comme "manger" (à l'indicatif), par exemple, nous pouvons avoir deux coupes: ou bien nous gardons la même série désinentielle que pour "parler" et, alors, la lettre "e", à la première personne du pluriel, appartient au radical; ou bien nous gardons un radical unique "mang" mais nous avons une autre série désinentielle "e, es, e, eons, ez, ent". Nous avons opté pour la première coupe, parce qu'il nous est apparu que le "e" dans mangeons est commandé par le "g", comme la "cédille" par le "c"; et, soit dit entre parenthèses, ce "e" n'a pas de propriété lexicale mais est un cas de morphographématique.

1.2.4.3.

Nous pouvons donc définir ce que nous entendons exactement par "catégorie" de conjugaison: "une relation originale radical-désinence"; ainsi,

tous les verbes dont le radical et la désinence se comportent exactement de la même façon sont référés à un autre choisi antérieurement pour modèle. Dès qu'il y a une moindre différence graphique, nous avons affaire à une autre relation radical-désinence, ou à une autre catégorie.

1.2.4.4.

Nous distinguons donc une catégorie de conjugaison, c'est-à-dire, un "schère structural", donc une abstraction; ensuite, un verbe type, c'est-à-dire, un verbe parmi ceux qui appartiennent à cette catégorie et qui sert de modèle de conjugaison à ces verbes; et enfin, des verbes du même type, c'est-à-dire, la liste des verbes qui sont référés au verbe type ou au modèle de conjugaison.

1.2.4.5.

Une fois donc que tous les cas de conjugaison donnés par les grammaires ont été classés selon les critères précédents, nous avons fait un relevé de tous les verbes contenus dans le Bescherelle, dans le Larousse en 10 volumes et dans le Robert en 6 volumes; chacun de ces verbes a été référé à son verbe type, de sorte que, pour chacune des catégories, nous avons le nombre exact de verbes, ce qui sert à donner un tableau de la conjugaison en français contemporain, et à mettre en lumière les schèmes productifs et les cas isolés.

2.

Voici en grandes lignes les résultats obtenus.

2.1.

Nous avons déterminé 89 catégories de paradigmes. L'appendice 2 montre les 15 premières catégories, représentées par les verbes types. Il s'agit des verbes dont l'infinitif est en "er". L'appendice 1 présente une table statistique de la répartition des verbes aux 89 catégories.

2.2.

Les 89 catégories ont donné lieu à l'établissement de 13 séries désinentielles (cf. l'appendice 3 qui en donne les 3 premières, lesquelles seront à conjuger tous les verbes en -er) représentées par un chiffre romain. Ainsi la catégorie "1.1", représentée par le verbe type "parler", fera son paradigme avec la première série désinentielle. Les chiffres sous

chacun des verbes types réfèrent au nombre de verbes qui se conjuguent comme les verbes types. Ainsi, des 7405 verbes que nous avons relevés, 5681 se conjuguent comme parler (un peu plus des 3/4) (c'était prévu); 120 comme commencer; 1 comme dépecer; 2 comme rapiécer; 208 comme manger, etc.

Ici quelques remarques s'imposent. Nous avons voulu être exhaustifs, c'est-à-dire que nous nous sommes occupés de tous les verbes, même rares, même archaïques, tant dans l'établissement des catégories que dans le classement des verbes de même type. De plus, pour des raisons de facilité, au point de départ, nous nous en sommes tenus à la distinction traditionnelle des verbes classés par infinitifs (lesquels infinitifs appartiennent plus à la catégorie du nom que du verbe). Nous avons donc un classement traditionnel des catégories en 4 groupes: "er" (1), "ir" (2), "oir" (3), et "re" (4).

2.3.

Il faudra maintenant procéder au classement de ces catégories, et cela peut se faire à différents points de vue.

2.3.1.

On peut classer les 89 catégories selon le critère de la "distribution des désinences aux radicaux" sans s'occuper des différences désinentielles ni des différences de radicaux. Ainsi, les catégories qui auraient la même distribution, c'est-à-dire la même "courbe", appartiendraient au même groupe. Il est possible de parler de courbe, puisque les radicaux de chaque verbe type se succèdent dans le même ordre en fonction des personnes et des temps, et les temps eux-mêmes (colonnes 1 à 8) se succèdent dans le même ordre (cf. appendice 2).
Ainsi: "chanter et rire"; "payer et traire"; "finir et suffire" etc.

2.3.2.

On peut conserver le "classement par infinitifs", c'est-à-dire le classement traditionnel, mais ce classement apparaît incohérent pour les raisons suivantes: les mêmes finales de l'infinitif, par exemple les verbes en "ir", n'ont pas nécessairement les mêmes séries désinentielles; et, surtout pour les verbes en "oir" ou "re": il y a en réalité autant de catégories que de verbes racines. Ainsi les 40 verbes qui se terminent en "oir" se répartissent en 19 catégories différentes, de sorte que donner "rece-

voir" traditionnellement comme modèle de conjugaison pour les verbes en "oir" relève de l'incohérence; de même les 263 verbes en "re" se répartissent parmi 38 catégories distinctes. On ne peut plus parler de modèle de conjugaison pour les verbes d'un artificiel "troisième groupe".

2.3.3.

Un troisième classement possible des catégories pourrait se faire selon le critère de regroupement par séries désinentielles", c'est-à-dire, ceux des paradigmes qui ont les mêmes désinences pourraient former un même groupe. Nous aurions ainsi 13 groupes de catégories. Ce classement ne serait pas intéressant, puisqu'il ferait perdre de vue la distinction plus importante de la distribution des désinences aux différents radicaux de même ordre;ainsi, les radicaux "emploi" et"employ", n'ont pas la même relation avec la désinence de type "I" que les radicaux "mang" et mange" ou "espér" et "espèr" avec le même type de désinence.

2.3.4.

On pourrait également classer les catégories en groupes selon le nombre des radicaux (c'est ce que fait Jean Dubois dans sa "grammaire structurale du verbe"). Ainsi tous les verbes à un radical, ou à 2 ou 3 etc., selon le cas, appartiendraient au même groupe. Nous aurions donc 7 groupes de catégories de conjugaison. Ce classement est basé en définitive sur le critère que c'est le radical qui est l'élément important du verbe; nous trouvons personnellement que la distribution des désinences aux radicaux est un meilleur critère pour classer les catégories puisque nous avons alors affaire à un même comportement, avec la variante que: ou bien les radicaux sont quelque peu différents ("appeler", "acheter", "employer") ou bien les radicaux sont identiques mais ont chacun leurs séries de désinences ("parler" et "rire").

2.3.5.

En définitive, le classement des catégories peut être motivé de 2 façons: ou bien nous pourrons conserver les paradigmes de surface (nous aurons donc 89 catégories distinctes) et la morphologie du verbe, dans cette optique, pourrait servir, par exemple, comme dictionnaire de référence, à la Bescherelle, (c'est-à-dire, le travail aurait pour fin de donner à chaque verbe classé par ordre alphabétique son modèle de conjugaison); ou bien, nous pourrons plutôt trouver, parmi les 89 paradigmes de surface,

ce qu'on pourrait appeler des "archi"-paradigmes, c'est-à-dire des modèles profonds qui serviraient alors comme principe de classement. (comme en syntaxe les structures profondes servent à classer les structures de surface apparemment diverses). Cette catégorisation en profondeur pourrait servir à dépasser le niveau de variantes combinatoires entre le radical et la désinence (cf. appendice 4) et à reprendre ce qui est sous-jacent à l'élaboration des structures paradigmatiques. Nous croyons, dans cette optique, qu'un usager de la langue ne peut pas fonctionner avec un si grand nombre de catégories; nous croyons plutôt qu'il y a un système derrière ces catégories de surface.

Tous les verbes en -er, sauf le modèle régulier "parler", sont reclassés ici en fonction des variations morphographématiques des finales des Radicaux (R), lesquelles variations sont dues à l'adjonction des désinences.

Ainsi, dans la partie A, les deux premiers cadres reliés entre eux représentent les verbes en -cer et en -ger qui ont deux variations radicales devant désinences (D) R-c-D et R-ç-D^1, R-g-D et R-ge-D^1, où D^1, représente les désinences commençant par a- ou o-. En A.4, les 3 cadres reliés entre eux représentent les verbes en -yer, qui ont aussi deux variations en fin de radical devant désinence D R-Vi-D et R-Vy-D^1, où D^1 représente les désinences à e muet, et où V représente les voyelles a, o ou u. En A.2 et A.3, les cadres représentent les verbes en -e-c-er et en -é-c-er, où C représente toute consonne, donc c et g (A.1); les radicaux, joints aux désinences, subissent en finale des jeux d'accents (sur le -e devant C) ou de double consonne.

Dans la partie B, ces regroupements sont repris, avec cette fois le rendement de chaque cas, c'est-à-dire le nombre de verbes qui sont soumis à ces variations en fin de radical. B.2, par exemple, signifie que les verbes en -yer ont 2 radicaux: Vi et Vy, où V représente la voyelle précédant le i ou le y avant adjonction des désinences: 3 voyelles sont possibles: a, o, et u, et le nombre de verbes est le suivant: 37 verbes en -ayer, 60 verbes en -oyer, 5 verbes en -uyer.

3.1.

Cette catégorisation, si l'on se place maintenant, en guise de conclusion, sur le plan des applications du travail, sera fort utile en docimologie puisque, dans un test de connaissance du français, par exemple, en vérifiant la connaissance des archi-paradigmes, nous vérifierons ipso facto si le candidat connaît les autres paradigmes; ce sera une économie de temps et une objectivation de la mesure.

3.2.

En pédagogie, le travail pourrait servir à la critique, à la création ou au complètement de méthodes de français (langue maternelle ou langue seconde).

3.3.

En grammaire, le travail pourrait servir à délimiter clairement le système oral et écrit et indiquer les schèmes productifs, en opposant règles et cas isolés.

3.4.

En linguistique générale, le système morphologique du verbe pourrait aider à déterminer le système et les lois de la langue; à indiquer les schèmes ratés ou bien les secteurs favorisés dans la langue.

3.5.

Enfin, en linguistique appliquée, les résultats du travail pourraient servir à une meilleure programmation des éléments dans les exercices sur le verbe, laquelle programmation serait appuyée sur une statistique et sur un critère de productivité des structures paradigmatiques.

89 catégories / 7405 verbes

Appendice 1

		fr. abs.
1.1	PARLER.....	5681
1.2.1	COMMENCER....	120
1.2.2	DEPECER.....	1
1.2.3	RAPIECER.....	2
1.3.1	MANGER.....	208
1.3.2	BROUMEGER....	1
1.3.3	PROTEGER.....	14
1.4.1	PAYER.....	37
1.4.2	EMPLOYER.....	65
1.4.3	ENVOYER.....	2
1.5	ARGUER.....	1
1.6.1	APPELER.....	173
1.6.2	ACHETER.....	90
1.6.3	ESPERER.....	229
1.7	ALLER.....	2
(15)		(6626)

2.1	FINIR.....	376
2.1.1	HAIR.....	1
2.1.2	FLEURIR.....	2
2.2.1.1	OUVRIR.....	10
2.2.1.2	FAILLIR.....	1
2.2.1.3	ASSAILLIR....	4
2.2.1.4	CUEILLIR.....	3
2.2.2	ACQUERIR.....	5
2.2.3	PARTIR.....	20
2.2.4	VETIR.....	3
2.2.5	COURIR.....	8
2.2.6	MOURIR.....	2
2.2.7	VENIR.....	32
2.2.8	FUIR.....	3
2.2.9	BOUILLIR.....	4
2.2.10	GESIR.....	1
2.2.11	OUIR.....	1
(17)		(476)

3.1.1	RECEVOIR.....	8
3.1.2	DEVOIR.....	2
3.1.3	SURSEOIR.....	1
3.1.4	CHOIR.....	1
3.1.5	DECHOIR.....	2
3.1.6	PREVOIR.....	1
3.1.7	VOIR.....	3
3.1.8	POURVOIR.....	2
3.1.9	SAVOIR.....	2
3.1.10	EMOUVOIR.....	3
3.2.1	POUVOIR.....	1
3.2.2	VOULOIR.....	1
3.2.3	VALOIR.....	3
3.2.4	PREVALOIR.....	1
3.3.1.1	ASSEOIR.....	2
3.3.1.2	SEOIR.....	2
3.3.2	PLEUVOIR.....	2
3.4.1	FALLOIR.....	1
3.4.2	AVOIR.....	2
(19)		(40)

4.1.1	RENDRE.....	55
4.1.2	PRENDRE.....	11
4.2.1	PLAINDRE.....	32
4.2.2	VAINCRE.....	2
4.3.1	MOUDRE.....	3
4.3.2	COUDRE.....	3
4.3.3	ABSOUDRE.....	2
4.3.4	RESOUDRE.....	1
4.3.5	SOURDRE.....	1
4.4.1	BATTRE.....	11
4.4.2	METTRE.....	16
4.4.3	FOUTRE.....	1
4.5.1	VIVRE.....	3
4.5.2	SUIVRE.....	4
4.6.1	CONCLURE.....	5
4.6.2	CLORE.....	5
4.7.1	BOIRE.....	2
4.7.2	CROIRE.....	2
4.8.1	CROITRE.....	5
4.8.2	PAITRE.....	2
4.8.3	NAITRE.....	2
4.8.4	CONNAITRE.....	10
4.9.1	TRAIRE.....	12
4.9.2	PLAIRE.....	4
4.9.3	FAIRE.....	9
4.10.1	CONDUIRE.....	23
4.10.2	NUIRE.....	2
4.10.3	BRUIRE.....	1
4.10.4	LUIRE.....	3
4.11.1	FRIRE.....	1
4.11.2	ECRIRE.....	11
4.11.3	RIRE.....	2
4.12	SUFFIRE.....	1
4.13.1	DIRE.....	2
4.13.2	MAUDIRE.....	1
4.13.3	INTERDIRE.....	8
4.13.4	LIRE.....	4
4.14	ETRE.....	1
(38)		(263)

CATÉGORIES DE VERBES (-ER)

#	Infinitif	R	radicaux	1 I. Prés.	2 P. S.	3 Imp.	4-5 F.S. &C.P.	6 S. Prés.	7 S. Imp.	8 Imp	9 P. Pr.	10 P. P.	11 Inf.
1.1. (I)	parler (5681)	1	parl	1-6	1-6	1-6	1-6	1-6	1-6	2,4-5	ant	é	er
1.2.1. (I)	commencer (120)	1	commenc	1-3,5-6	6	4-5	1-6	1-6		2,5		é	er
		2	commenç	4	1-5	1-3,6			1-6	4	ant		
1.2.2. (I)	dépecer (1)	1	dépèc	1-3,6			1-6	1-3,6		2			
		2	dépeç	4	1-5	1-3,6			1-6	4	ant		
		3	dépec	5	6	4-5		4-5		5		é	er
1.2.3. (I)	rapiécer (2)	1	rapièc	1-3,6				1-3,6		2			
		2	rapiéç	4	1-5	1-3,6			1-6	4	ant		
		3	rapiéc	5	6	4-5	1-6	4-5		5		é	er
1.3.1. (I)	manger (208)	1	mang	1-3,5-6	6	4-5	1-6	1-6		2,5		é	er
		2	mange	4	1-5	1-3,6			1-6	4	ant		
1.3.2. (I)	protéger (14)	1	protèg	1-3,6				1-3,6		2			
		2	protége	4	1-5	1-3,6			1-6	4	ant		
		3	protég	5	6	4-5	1-6	4-5		5		é	er
1.3.3. (I)	broumeger (1)	1	broumèg	1-3,6			1-6	1-3,6		2			
		2	broumege	4	1-5	1-3,6			1-6	4	ant		
		3	broumeg	5	6	4-5		4-5		5		é	er
1.4.1 (I)	payer (37)	1	pai	1-3,6			1-6	1-3,6		2			
		2	pay	1-6	1-6	1-6	1-6	1-6	1-6	2,4-5	ant	é	er
1.4.2. (I)	employer (65)	1	emploi	1-3,6			1-6	1-3,6		2			
		2	employ	4-5	1-6	1-6		4-5	1-6	4-5	ant	é	er
1.4.3. (II)	envoyer (2)	1	envoi	1-3,6				1,2-3,6		2			
		2	envoy	4-5	1-6	1-6		4-5	1-6	4-5	ant	é	er
		3	enver				1-6						
1.6.1. (I)	appeler (173)	1	appell	1-3,6			1-6	1-3,6		2			
		2	appel	4-5	1-6	1-6		4-5	1-6	4-5	ant	é	er
1.6.2. (I)	acheter (90)	1	achèt	1-3,6			1-6	1-3,6		2			
		2	achet	4-5	1-6	1-6		4-5	1-6	4-5	ant	é	er
1.6.3. (I)	espérer (229)	1	espèr	1-3,6				1-3,6		2			
		2	espér	4-5	1-6	1-6	1-6	4-5	1-6	4-5	ant	é	er
1.7. (III)	aller (2)	1	v	1-3,6						2			
		2	all	4-5	1-6	1-6		4-5	1-6	4-5	ant	é	er
		3	i-				1-6						
		4	aill					1-3,6					

Appendice 3

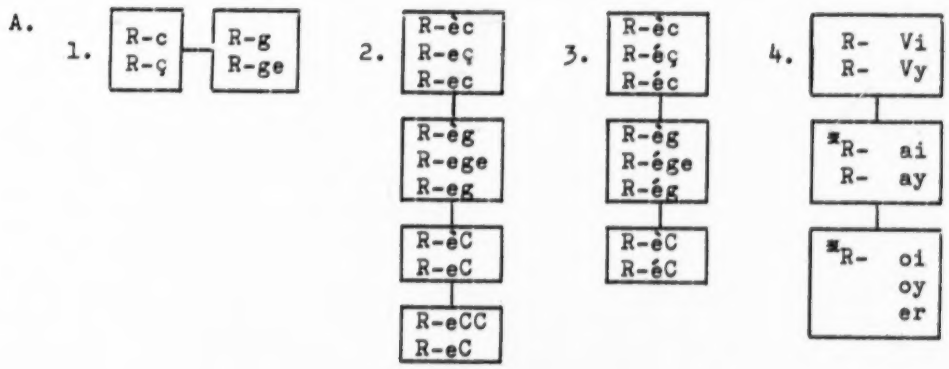
Types de Désinences

		Ind. Prés.	Passé Simple	Imp.	Futur Simple	Cond. Prés.	Subj. Prés.	Subj. Imp.	Impér.	Part. Prés.	Part. Passé	Inf.
I	1	e	ai	ais	erai	erais	e	asse				
	2	es	as	ais	eras	erais	es	asses	e(s)			
	3	e	a	ait	era	erait	e	ât				
	4	ons	âmes	ions	erons	erions	ions	assions	ons			
	5	ez	âtes	iez	erez	eriez	iez	assiez	ez			
	6	ent	èrent	aient	eront	eraient	ent	assent				
	7									ant	é	er
II	1	e	ai	ais	rai	rais	e	asse				
	2	es	as	ais	ras	rais	es	asses	e(s)			
	3	e	a	ait	ra	rait	e	ât				
	4	ons	âmes	ions	rons	rions	ions	assions	ons			
	5	ez	âtes	iez	rez	riez	iez	assiez	ez			
	6	ent	èrent	aient	ront	raient	ent	assent				
	7									ant	é	er
III	1	ais	ai	ais	rai	rais	e	asse				
	2	as	as	ais	ras	rais	es	asses	a(s)			
	3	a	a	ait	ra	rait	e	ât				
	4	ons	âmes	ions	rons	rions	ions	assions	ons			
	5	ez	âtes	iez	rez	riez	iez	assiez	ez			
	6	ont	èrent	aient	ront	raient	ent	assent				
	7									ant	é	er

RECLASSEMENT DES CATEGORIES A DESINENCE (I)

Appendice 4

A.



B.

1.

c	;	g
ç	;	ge

(346)

c: 120 + 1 + 2 = 123
g: 208 + 1 + 14 = 223

2.

V^x_i
V^x_y

(104)

$V^x_{(3)}$: a (37), o (60), u (5)

3.

è	C^x
é	C^x

(246)

$C^x_{(23)}$: (99) r, (28) t, (20) d, (18) n, (15) g, (14) ch, (7) qu, (7) tr, (6) u, (6) s, (5) l, (4) br, (3) m, (2) gn, (2) gl, (2) gr, (2) c, (1) y, (1) p, (1) v, (1) j, (1) cr, (1) vr

4.

è	C^x
e	C^x

(92)

$C^x_{(11)}$: (25) l, (23) n, (15) t, (14) v, (5) s, (4) m, (2) p, (1) vr, (1) d, (1) c, (1) g

5.

e	CC^x
e	C^x

(173)

$C^x_{(2)}$ = (94) l, (79) t

Abstract

This article deals with the morphology of the verb in written French. The research project herein described was undertaken by the Language Bureau, Public Service Commission, an organ of the Canadian Federal Government.

Economy in second language teaching and testing can be effected only when the elements to be taught and tested have been chosen objectively. What is needed, then, are criteria by which to choose, from a plurality of elements, those which are important. This paper proposes one such criterion, "productivity", for verbs in written French. Productivity refers to the quantity of lexical units within a conjugation.

The immediate aim of the research project was to determine for the whole of written French, the quantity and types of conjugations and the number of verbs (= lexical units) within each type. A statistical profile was plotted for the number of verbs appearing in each type of conjugation. Types of verbs which were felt intuitively to be quite important were revealed as isolated cases.

A survey and listing of pre-established conjugations (= types) from available grammars was done. Each verb from A to Z in the most complete of French dictionaries (Larousse - 10 volumes; Robert - 6 volumes, to name the two chief sources) was classified according to its membership in a type. Verbs which could not, for morphological reasons, be classified within the pre-established types were classified as new types. Many difficulties were encountered in this classifying task due to omissions or contradictions between dictionaries.

Appendix 1 shows the 89 types of verbs grouped in four blocks according to the infinitive endings and the number of verbs pertaining to each type.

Appendix 2 shows the relationship between the base form (radical) and the inflections. The inflections are represented by numbers 1 to 6; the 11 columns each refer to a simple tense. Thirteen inflection types

have been found; each type is represented in this chart by a Roman numeral. Finally, only verbs in # -er-# are given in this appendix, by way of illustration.

Appendix 3 gives the first three termination types for conjugating verbs in # -er-#.

Appendix 4 shows a reclassification of verbs in # -er-# where R represents radicals (base form), V vowels, and C consonants. In part A, the radical endings which combined with conjugation inflections, are given in frames. For example, in A.1, verbs in # -cer-# and # -ger-# will each have two radical variations:

# -cer-#	(-c- and -ç)
# -ger-#	(-g- and -ge)

Federal Republic of Germany

DATA PROCESSING SYSTEMS AND LANGUAGE TEACHING

by

Dr. Rolf-Dietrich Keil, Euskirchen

The organizational coupling of the central translating pool, the interpreter service and the language training complex of the Federal Armed Forces within one Language Service is an indication that we, at least, consider that these separate services have something in common, and through this common factor they will have certain points of contact. Clearly what they have in common is their common concern with languages, and the particular point of contact on which I should like to enlarge a little is the help which all three can obtain from the electronic computer. The translator, the interpreter, the text-book author and even the language teacher - each in his own way - , is able to make use of the services of these machines. The procedures of machine-aided translation, as developed and used in Mannheim, are a substantial contribution to the work of the translator. Some of these procedures are extremely useful for the interpreter too. But what can computers do for those concerned in language teaching?

Let me make it quite clear immediately that we are not so unrealistic as to think in terms of computers as teaching machines. We have too many urgent practical problems to solve and a budget far too stringent to allow of such a time-consuming and expensive luxury. Indeed, the idea of making use of computers in the sphere of language training at all, arose out of the desire to make our training as effective and economical as possible. This means that this available time has to be fully exploited in the learning of "absolute essentials". The quality of instruction is a matter of method, and here, with the help of such technical aids as language laboratories, we believe we have made and will continue to make good progress. What though are "absolute essentials"? What has to be taught?

Clearly, the material of foreign language teaching is the foreign language itself - its sounds, forms, syntactical structures and patterns. It must be heard, comprehended, spoken, read and written and all of these factors take on form and significance through the medium of words. The problem is then, to determine which words amongst the virtually measureless mass of the vocabulary of a language are the ones which must be learned and what priority should they have? Secondly, which syntactical structures and patterns are the ones which will permit oral and textual comprehension and meaningful speech? Putting it crudely, we may say that the most important words are those with the highest frequency. It is these which we wish to identify and here, the computer can be invaluable.

The demand made upon it here is almost diametrically opposed to the demand made upon it by the translator. His training and his knowledge of the language equip him to deal with its structures and general vocabulary. It is the rare and unusual words on which he wants information - words, which he has not previously encountered or of whose meaning he is not sure.

For language teaching purposes, however, particularly in teaching beginners, we need the words with the highest frequency. Which these are we can estimate with any degree of reliability for only a very small proportion of the vocabulary of our mother tongue - about the first one to two hundred of a word frequency count - those words, which, as has often been demonstrated, make up something like 40 to 50 % of any text of sufficient length. As soon as we are required to go beyond this small group and decide intuitively whether a particular word is frequent or rare, important or insignificant, we are assailed by doubts. We can only proceed if we have precise data. That fact that different frequency counts show varying results depending upon the text material on which they are based is, for the purposes which we have in mind, in no way a disadvantage. On the contrary - for what we require is not a representative word frequency count of any one language as a whole for research purposes but a clearly circumscribed body of material which will permit our student to operate within a clearly defined area of foreign language activity. Thus the only thing we have to bear in mind in making our text selection is the training objective. In so doing, we achieve two things - we are able to eliminate the superfluous in arriving at our essential vocabulary and secondly, we are able to keep the text corpus to be evaluated comparatively small. This is possible since it has been established that the repetition index per

word is much higher in thematically homogenuous text material than it is in disparate text material and thus, the necessary probability of frequency is achieved with a few hundred thousand running words. Since English and French are part of the normal school curriculum, we at the Sprachenschule der Bundeswehr only deal with advanced students of these languages, students who will later wish to make use of their language skills in a variety of different fields. Since there are, in any case, the established and reasonably reliable frequency counts of Thorndike-West and Gougenheim there is no urgent necessity for counts of our own. In those languages in which we train beginners however, the situation is very different. Amongst these languages, the one for which we have the greatest number of students is Russian. It is for this reason that we have concentrated our attention, at least for the time being, on this language.

There are, it is true, frequency counts for Russian too - "The Russian Word Count" by D. Josselson, completed in the USA in the fifties and E. Steinfeld's count which appeared in the Soviet Union in 1963. These two counts were of great assistance to us in the compilation of an interim minimal vocabulary. Use was made too of two minimal vocabulary lists prepared for use in the teaching of Russian in Armenian and German sohools, and, within certain limits, of the Pushkin dictionary. From these sources we were able to compile a minimal vocabulary of some 2,500 different words which was to constitute the basis of the text-books in the lower proficiency levels - "A" and "B". The weakness of this vocabulary list was that the text material on which it was based was primarily of a literary and journalistic nature so that the specifically military vocabulary is small and, one might say, purely coincidental. When we compiled our minimal vocabulary, some four years ago, we attempted to remedy this short-coming by working into it some 600 purely military terms selected quite subjectively by a group of teachers of Russian. The main aim of the registration and statistical evaluation programme being carried out now on general military text material is to subject the minimal vocabulary list, which I described earlier and which was completed since by some new publications especially Markov's count of the spoken language to a text coverage check, to validate it and to revise it in the light of the results which we obtain.

To this end we have instituted the following programme. A text corpus of about 260,000 running words has been recorded on punch cards and then transferred on to magnetic tape. A text corpus is made up of five

groups each consisting of 26 individual texts of approximately the same length. Text group 1 is army texts, 2 - air force texts, 3 - navy texts, 4 - newspaper and magazine texts on military, technical and general subjects, and 5 - literary texts on military subjects. The frequency and dispersion of each individual word is then calculated for the text groups separately and then for the text corpus as a whole. Then, using a formula developed by Prof. Juilland during his researches in five Romance languages, the computer calculates the "usage index" for each word. The results thus obtained will be compared with our interim minimal vocabulary and then this vocabulary consisting of about 2,500 words will be finalized and printed. It will then be used as a basis for the work on the text-book for Proficiency Level "B". The text-book for Proficiency Level "A", printed in 1967, was based on the interim minimal vocabulary. The list will be available to teachers and will be of assistance to them in their teaching until such time as the "B" text-books are printed. For this reason, it includes, in addition to the word list itself, summaries of all the inflectional types met with in the material.

The completion of the vocabulary lists for Proficiency Levels "A" and "B" does not mean that the data now stored in the system have become uninteresting or superfluous. On the contrary, other important and valuable operations can now be carried out. As a first possibility I should like to mention concordance programmes for certain grammatical problems. We shall be able to obtain, for example, by way of statistics, information on the real situation in such open questions as the object case after negations, the cases governed by certain verbs, the subject predicate agreement with subject expressions containing cardinal numbers and so on - all of which will help in the classroom presentation. Everyone familiar with Russian, above all every teacher of Russian will be able to see, from this short list of possibilities, the immense potential amount of assistance which the computer is able to give.

None of these problems is dealt with satisfactorily in the existent grammar books - all of them permit only of statistical solutions. But the compilation of such concordances - material which is comparatively easy to programme - does not exhaust the possibilities of the stored text material. A later planning phase contemplates a pattern frequency count. Thus, in the field of syntax too we hope to obtain usuable results which, of course, can again be placed at the disposal of the text-book compilers.

These concordance programmes and the syntax programme alone show that we did not store these 260,000 words (tokens) purely in order to extract the 2,500 most frequent (types) out of some 20,000. Even the less frequent vocabulary is not superfluous. The break-down into text groups permits us to determine for example the characteristic termini of army, air force and naval terminology and to make use of this knowledge when training students of higher proficiency levels where a certain measure of specialist training towards the student's future military employment has to take place. These termini can also be made use of in translator training.

Further, the punch cards have been punched in such a way that we are able to list all the abbreviations which occur in the material. This too will be of value in translator training and in terminological work in general. We have now re-established the connection with the procedures of machine-aided translation at Mannheim. There is one other aspect which I should like to mention briefly - an aspect which has a direct connection with our main topic here - mechanical translation aids, and in fact, the most highly developed phase of semi-automatic translation. In this phase the text is checked for termini by the computer, operating independently. We are able, on the basis of our frequency counts, to supply the computer with an elimination list which obviates unnecessary searching for non-termini or for frequent, and therefore known termini, the so-called "90 % approach". In this way, the frequency count, working, as it were "back to front" would simplify and speed up the final stage in the process developed by the Übersetzerdienst. Just when that will be cannot be predicted at the moment with any certainty. The storing of the Russian text corpus was completed in February 1967. The minimal vocabulary lists for instruction in Proficiency Levels "A" and "B" will be available around May 1969. Long before the lists are in the hands of the printers, the computer can carry out a number of important concordance programmes, the results of which should be available in time to be utilized in the compilation of the "B" text-books. This work should be followed by the syntax programme.

Sommaire

L'idée d'utiliser des équipements électroniques de traitement des données dans le domaine de l'enseignement des langues repose sur des considérations économiques. Vu le peu de temps disponsible pour cet enseignement, il est nécessaire de définir les connaissances les plus indispensables en la matière. Parmi elles, le vocabulaire joue un rôle décisif. Or, ce vocabulaire permet d'être déterminé avec rapidité et fiabilité par l'ordinateur.

Etant donné qu'il existe déjà des dénombrements de fréquence des mots pour les langues anglaise et française, les efforts se sont concentrés pour l'instant sur le russe. Le premier objectif consiste à valider le vocabulaire minimal provisoire, déjà établi pour les degrés d'enseignement A et B sur la base d'un corpus de 260.000 mots tirés de textes militaires. Ce corpus se compose de 5 groupes de textes comprenant chacun 26 textes différents et se répartissant comme suit: 1er groupe: Armée de Terre, 2ème groupe: Armée de l'Air, 3ème groupe: Marine, 4ème groupe: thèmes journalistiques de caractère militaire et technique, 5ème groupe: littérature militaire. La valeur d'utilisation de chaque mot est calculée par l'ordinateur d'après une formule. Les résultats sont comparés au vocabulaire minimal provisoire en vue de le compléter et de le publier ensuite.

Le corpus enregistré sur bande magnétique est aussi susceptible de servir à l'exécution de plusieurs programmes de concordance ayant des problèmes grammaticaux pour objet; en outre, le dénombrement de fréquence d'un mot dans les groupes de textes permet de constituer des listes de la terminologie spéciale à chacune des Armées. Ces listes sont d'une haute valeur pour l'enseignement dans les degrés supérieurs et pour la formation des traducteurs. Une dernière possibilité d'utilisation du corpus, actuellement prise en considération, est d'effectuer un dénombrement de fréquence de syntaxe dont le résultat irait également au profit du travail d'enseignement et de l'organisation de l'instruction.

LE CENTRE DE LANGUES ET ETUDES ETRANGERES MILITAIRES DE L'ARMEE DE TERRE FRANÇAISE (C. L. E. E. M.)

Bien que sa nécessité ait été depuis longtemps sousjacente, la connaissance des langues étrangères n'a pas fait l'objet, initialement, d'une structure unique et cohérente, dans l'Armée de Terre française.

En effet, c'est au fur et à mesure des besoins ou des nécessités qui se présentaient que des organismes virent d'abord le jour, créés au gré des circonstances:

- Affaires Militaires Musulmanes
- Centre d'Etudes Germaniques
- Centre d'Etudes Slaves etc...

Ces Centres rendaient certes des services, mais ils n'avaient - étant très disparates et trop spécialisés - qu'un rendement global insuffisant.

Un premier effort d'unification fut accompli, quand fut décidée par le Commandement, la création du Centre Militaire d'Etudes Européennes (C.M.E.E.), dont les études étaient davantage orientées vers la connaissance des pays et des armées, que vers l'acquisition proprement dite des langues, supposées déjà connues.

C'est en conclusion de ce premier essai centralisateur, en vue de l'acquisition non seulement d'un langage, mais d'une terminologie technique indispensable, que le C.L.E.E.M. a été créé, le 21 octobre 1965.

Son action s'exerce au profit:

- des personnels militaires de l'active, de la disponsibilité et des réserves de l'Armée de Terre;

- exceptionnellement, des personnels des autres armées.

Son champ d'action recouvre toutes les langues (courantes ou non), dont la connaissance paraît utile à l'Armée.

Ses missions sont les suivantes:

1) dans le domaine de l'enseignement, le centre doit être l'organisme pilote chargé:

- d'établir, de mettre à jour et de soumettre à l'approbation du commandement la documentation nécessaire (lexiques et glossaires militaires modernes; documents d'étude écrits ou enregistrés; aperçus sommaires ou monographies "ouvertes" sur les armées étrangères), en vue de sa diffusion;

- de coopérer à cet enseignement et aux épreuves correspondantes qui le sanctionnent (certificats militaires de langues, examens et concours);

- d'assurer lui-même - directement - une part importante de cet enseignement, pour certaines langues:

  - par des stages spécialisés, organisés à l'initiative du commandement (stages de formation, de perfectionnement ou de recyclage des praticiens et des professeurs)

  - par des cours oraux ou par correspondance, notamment au profit des officiers préparant, dans le cadre de l'Enseignement militaire supérieur scientifique et technique, le Brevet ou le Diplôme techniques - option "langues et études étrangères";

- d'assurer outre la formation spécialisée de personnels d'active, la formation et l'instruction linguistique et militaire de perfectionnement du corps des officiers de liaison interprètes de réserve;

- d'être, par ses travaux de recherche, l'organisme technique d'étude du commandement, en matière:

  - de politique d'expansion de la connaissance des langues dans l'armée
  - de sélection et de maintien en condition des personnels correspondants
  - de doctrine d'enseignement
  - de progrès pédagogique et technique.

Pour remplir ces missions d'enseignement et d'études, le Centre de Langues et Etudes Etrangères Militaires est habilité:

- à établir les liaisons techniques nécessaires avec l'Université;
- à recevoir des organismes militaires compétents la documentation appropriée sur les pays et les armées étrangères;
- à établir des contacts de travail avec des organismes similaires étrangers.

2) <u>dans le domaine de l'emploi,</u> le Centre doit assurer:

- des travaux de traduction
- des missions d'interprétariat et de liaison (le plus souvent à un échelon élevé)

3) <u>dans le domaine de la gestion du corps des Officiers de Liaison Interprètes de Réserve</u> (O.L.I.R.)

- d'être le conseiller technique du Général, Directeur des Personnels de l'Armée de Terre.

S'il faut quelques mois pour former un chef de section, l'Armée Française considère que pour former valablement un linguiste militaire, il faut de trois à cinq ans.

Il est donc logique et nécessaire qu'à ces missions générales déjà lourdes, s'ajoutent quelques missions particulières:

C'est ainsi que le C.L.E.E.M. assure:

- <u>des cours et stages à plein temps</u>

  - d'officiers
  - de sous-officiers et de personnels féminins de l'Armée (S.P.F.A.T.)

  en ce qui concerne l'étude du 2e degré des certificats militaires de langue russe et arabe (éventuellement d'autres langues difficiles et rares).

- un complément de formation des futurs officiers brevetés et diplômés techniques, par le soutien des professeurs et répétiteurs (éventuellement civils); par sa documentation, sa bibliothèque et ses studios-laboratoires de langues.

Enfin, le Centre fournit les sujets et les corrigés-type des 1°, 2e et 3e degrés des examens pour l'obtention des certificats militaires en toutes langues.

Il assure, en outre la correction des épreuves écrites et l'examen oral des 2e degrés des langues russe et arabe et aide à la préparation des 3e degrés des langues allemande et anglaise.

De plus, il apporte son aide aux régions militaires et aux commandements extérieurs, dans l'organisation et le déroulement des autres examens.

Pour remplir la totalité de ses missions le Centre de Langues et Etudes Etrangères Militaires est organisé, sous les ordres d'un Colonel, assisté d'un Commandant en Second.

Il comprend:

1) - <u>Un Bureau d'Etudes Générales,</u> chargé de toutes les études théoriques et prospectives concernant l'enseignement des langues et le fonctionnement du Centre. Il travaille à moyen et à long terme et assure la liaison avec l'Université et les établissements ou organismes étrangers similaires.

2) - Une direction des études appliquées: qui anime, contrôle et coordonne l'action:

- de la section "Cours et Stages"

- des sections linguistiques:

  - Anglo-saxonne
  - Germanique
  - Slave (sous-section tchèque)
  - Arabe
  - Hispanique
  - Italienne
  - Chinoise
  - Langues rares

Les sections linguistiques disposent:

- de deux studios-laboratoires
- de moyens cinématographiques
- d'une salle de documentation graphique
- d'une bibliothèque

3) - Un groupe de commandement auquel incombent:

- le Support logistique
- L'Administration des personnels d'active et de réserve rattachés au Centre (près de 700 officiers de réserve)

Le Centre ne forme pas "Corps". Il dépend de la Direction Technique des Armes et de l'Instruction et est rattaché administrativement au Groupement des Services des Ecoles de l'Enseignement Militaire Supérieur (G.S.E.E.M.S.).

Afin de donner une idée quantitative du volume en personnels du Centre de Langues et Etudes Etrangères Militaires français, les effectifs employés dans le courant de 1968, sont de:

- 19 officiers
- 13 sous-officiers et personnels féminins (S.P.F.A.T.,
- 28 hommes du rang, appartenant au contingent.

Parmi ces derniers, le Centre compte actuellement:

- 7 professeurs agrégés de l'enseignement secondaire
- 8 licenciés
- 13 titulaires de divers diplômes consacrant des études supérieures (Ecole Supérieure d'Interprétariat et de Traduction de l'Université de PARIS, Ecole des Hautes Etudes Commerciales, etc...)

C'est pour l'instant, cette organisation qui forme, dans l'Armée de Terre française, l'essentiel des linguistes militaires d'active et de réserve.

SUMMARY

There was initially no organisation in the French Army for language training, but later various organisations for Area Study were combined into the Military Centre for European Studies, and the Languages element was added in 1965 to create the Centre for Military Studies and Foreign Languages (C.L.E.E.M.).

CLEEM accomodates Army personnel (active, on half pay and in the reserve), and exceptionally personnel of the other Services, and covers all languages which the Army considers useful.

It prepares glossaries, dictionaries and courses of study; teaches up to military language certificate and other examinations; trains specialist personnel and Reserve Liaison Officer Interpreters; does translating and interpreting, and advises the Director of Personnel.

Under a Colonel and a Second in Command, it consists of a General Studies Wing, an Applied Studies Wing and a Headquarter Wing, and has 19 officers, 13 NCOs and Women's Army Corps personnel, and 28 other ranks, all highly qualified.

UNIFICATION OF FOREIGN LANGUAGE PROFICIENCY LEVELS AND ENGLISH LANGUAGE TESTS IN THE ITALIAN ARMED FORCES

The need for collaboration between different countries, which arose immediately after the end of the war, led to the creation of organizations whose task was to find solutions to problems of various kinds, whether of regional or universal interest. UN and NATO are two of these special bodies. Italy's participation in their activities posed the problem to prepare linguistically those who work in or on behalf of these organizations.

In an examination limited to Armed Forces personnel, it became necessary to ascertain whether officers who were qualified for certain duties from a professional point of view were also linguistically prepared. This refers particularly to personnel destined to work at Allied Headquarters of NATO, to attend courses abroad and to serve as military observers with the United Nations.

Such an evaluation, however, immediately presented considerable difficulties, largely due to the fact that the grade of language proficiency necessary to fulfill the prescribed duties was often defined in a different way, always leaving room for doubt. Either it referred to knowledge of the language as a whole, qualifying such knowledge with an adjective (e.g., a "good" knowledge) to which an extensive and arbitrary scale of values could be applied, or it referred to one or more abilities (speaking, writing, understanding the written or spoken language) without even specifying such abilities and without clarifying the reason why some abilities would be required and others excluded, even when such a clarification would have been necessary to avoid confusion.

The diversity found in the definition of the various grades of linguistic proficiency at the international level was analogous to the one at

the national level, originating in the fact that language teaching was done independently by each branch of the Armed Forces with no higher office directing the necessary co-ordination.

The necessity of standardizing the grades of foreign language proficiency in NATO has long been felt. In fact the following are among the recommendations made by the "sub-committee on foreign language teaching" at the end of the 1964 "SHAPE Language Co-ordination Conference": "The sub-committee recommends the correlation of existing scales of foreign language proficiency. To this end it is recommended that comparisons be made between:

a. USA, UK, and French scales.

b. German and Italian scales.

These would serve as a basis for a questionnaire to be sent out to the member nations by the SHAPE Secretariat. They would also serve as the basis for the formulation of NATO military scales of foreign language proficiency if desired."

For various reasons the recommendations of the sub-committee were not adopted. In 1966, however, when the undeniable linguistic demands brought about the formation of BILC, the problem of foreign language proficiency levels and pertinent tests came to the fore once again. It was discussed at the December Conference in 1967 and also constituted the central theme of the articles which represent the contribution by the various countries to the first issue of the "BILC Bulletin". The exchange of opinions on this subject which took place among the delegations and the thorough examination of it through exhaustive reports by experts can be considered as a first significant step towards unification of foreign language proficiency grades in NATO. However, it is clear that such a goal will not be attained without first passing through the intermediate stage of a corresponding unification at the national level.

At the beginning of 1967 the creation of the Foreign Language Section in the Defense General Staff was intended to co-ordinate the activity of language training carried out by each branch of the Armed Forces. Up to that time, advanced language training, aimed at preparing personnel to perform duties of an international nature, had been carried out in the following ways:

- in the Army and Air Force: by the respective schools of Foreign Languages using the "American Language Course" of the Defense Language Institute

- in the Navy : by the Shenker Institute using the Shenker method.

Furthermore, each branch of the Armed Forces used a different number of proficiency grades, which were defined in different ways and arrived at by means of various examinations ("tests" or traditional-type examinations).

In listing the duties assigned to the new Section, precedence was given to defining proficiency grades in foreign languages and to elaborating corresponding examinations that would be valid throughout the Armed Forces. The reason for such preference stemmed from a twofold necessity:

- of comprehension, when reference was made to the linguistic preparation which an officer or non-commissioned officer would require in order to carry out specific duties;

- of preparation to deal with the same problem at the international level since the existence of this problem and the need to solve it were recognized, and since it was believed that BILC, which Italy had joined, would shortly re-examine the question.

With reference to grades it was believed possible to attain the necessary differentiation and to avoid complexity by limiting their number to four. They were defined in the following manner:

- 1st grade; corresponding to an elementary knowledge
- 2nd grade; corresponding to a good knowledge
- 3rd grade; corresponding to a very good knowledge
- "full knowledge"; equivalent to a 3rd grade knowledge with specialization (translator or interpreter).

Furthermore, for each level, the desired degree of proficiency was indicated for the four fundamental abilities, to be developed harmoniously.

For example, it was decided that a 1st grade foreign language proficiency would be given to one who:

- would be able to grasp the idea of simple sentences read at slow speed
- could express himself with a correct if not perfect pronunciation
- would be able to understand a written text containing a minimum of current expressions
- could apply the principal grammatical rules.

But the definition of the degree of proficiency in the language as a whole and in the specific abilities included in the various grades did not completely eliminate the uncertainty that could result, for instance, from the expression "elementary knowledge" or "principal grammatical rules", even though such definitions represented an advance with respect to those appearing in national and international documents. Therefore, it was decided to integrate the above-mentioned definitions with phonetic, lexical, and structural "anchors", that is, to establish the phonetic elements as well as the vocabulary and grammatical structures for every proficiency grade and foreign language.

With regard to proficiency tests it was decided that, for the time being, their construction should be limited to the English language. From an early brief study of the problem that such construction presented there emerged the preliminary need to make a certain choice and to meet a certain requirement. The choice was between the tests and traditional-type examinations (composition, translation, dictation). The test was chosen because:

- it permitted the formulation of an objective judgement
- it offered the possibility of examining a candidate's proficiency in a vast range of particularly important structural problems, as well as those of a phonetic and lexical nature, all in a short time
- it could be scored easily and quickly.

The last reason became particularly relevant upon considering the sizable number of candidates to be examined (all members of the Armed Forces with a knowledge of English).

The requirement to be met was that of confronting all candidates with the same difficulties in passing the test. This requirement could be ful-

filled by constructing the test with the vocabulary and structures that were common to the various texts used by the Armed Forces and had an analogous position in the said tests.

Once the proficiency grades were defined and after the type of examination and the principal requirements it must meet were chosen, the C.I.L.A. (Italian Center of Applied Linguistics) was given the task of preparing a project which, based on these requirements, would lead to the construction of the test.

The project, planned by a noted linguistics expert, Professor TITONE, aimed at the construction of a test which would permit evaluation of the three fundamental aspects of the English language (phonology, grammar and vocabulary). The project consisted of three phases:

- 1st phase: selection of the linguistic material in the two courses (American Language Course and Shenker Method)
- 2nd phase: construction of the test using the linguistic material found and graded in the first phase
- 3rd phase: codification of the evaluation scale.

The first phase, in turn, involved:

- an initial listing and empirical distribution of grammatical and lexical material through combining:
  - for first grade language proficiency: the vocabulary and the grammatical structures contained in volumes 1.100 and 1.200 of the American Language Course (the course consists of eight volumes) and in lessons 1 - 25 of the Shenker Method (consisting of 75 lessons)
  - for second grade language proficiency: the vocabulary and the grammatical structures contained in volume 1.300 - 1.400 of the A.L.C. and in lessons 26 - 50 of the Shenker Method
  - for third grade language proficiency: the vocabulary and the grammatical structures contained in volume 2.100 - 2.200 - 2.300 - 2.400 of the A.L.C. and in lessons 51 - 75 of the Shenker Method
- selection of useful elements and their arrangement on a scale divided into three proficiency levels, to be done in the following manner:

- for vocabulary, on the basis of frequency
- for grammatical structures, on the basis of frequency and difficulty. (The grade of difficulty to be arrived at according to the degree of contrast between Italian and English structures.)

The second phase, as mentioned above, concerned the construction of the test. This test had to be administered collectively, be of "pencil-and-paper" type and fulfill the following criteria: validity, reliability, scorability and economy. Furthermore, the test had to furnish the information needed to confer one of the first three proficiency grades. For the fourth grade a different test was envisioned which would permit a more thorough examination of oral ability and which would be given to those who had already passed the first test, receiving the 3rd grade proficiency grade with a minimum score to be determined.

The third phase, codification of the evaluation scale, was planned in the following manner. A temporary scale would be established, based on the results of the test given to a group of 100 students with a heterogeneous background. The final scale would be fixed after the test had been administered to about 1.000 students.

In November 1967 a Working Group, led by the Head of the General Defense Staff Foreign Language Section, began carrying out the project's first phase: the selection of structural as well as of lexical material (adjectives, nouns, verbs, adverbs) found in both texts. This material was grouped according to three levels, which corresponded to the three proficiency grades, solely on the basis of vocabulary frequency and of difficulty and frequency of grammatical structures. However, at the beginning, the possibility emerged that the frequency with which the words had appeared in the texts under consideration was of doubtful significance because it was influenced by didactic demands. Therefore, recourse was made to the well-known "General Service List of English Words" by Michael West, which contains the 2.000 words held to be the most useful in the English language. This list also furnishes the absolute and semantic frequency with which every word was used in a body of 5.000.000 words drawn from daily conversational topics. Thus it was decided to give precedence to those words which appeared in West's publication as well as in both texts when making up the items of the test for the three grades.

The next step involved the creation of a vocabulary card which would:

- identify the word as a noun, adjective, verb or adverb
- indicate whether the word appeared on the "General Service List of English Words" by Michael West
- pinpoint the position of the word in the two texts being analysed (according to chapter) and indicate the frequency of its use only if the word did not appear on the afore-mentioned "General Service List". If the word appeared on the "General Service List", it was sufficient to indicate its presence in the various chapters because this was considered enough to recommend the use of the word in the construction of the test.

The problem was solved by using special vocabulary cards (see Annexes 1 and 2) where:

- the colour of the card identifies the word (white: noun; yellow: verb; red: adjective; grey: adverb)
- words found on the "General Service List" are underlined
- the position of the word in the texts to be analysed is shown by the position in which the letter (a, b, c), corresponding to the meaning with which the word appeared, is placed under the headings D.L.I. and Shenker, where each box represents one chapter of the American Language Course (D.L.I.) or of the Shenker Method (Shenker). The letter is written down only once for each chapter if the word is on the "General Service List", and every time the word appears if the word is omitted on the "General Service List".

In preparing the cards for grammatical structures the need was borne in mind to compare the structures found in the two previously cited texts (A.L.C. and Shenker) with those of a list, presumed complete, found in the publication "A Guide to Patterns and Usage in English" by A. S. Hornby. It was decided, therefore, to fill in a card for each structure found in Hornby's publication and then to note on it the frequency and the position of each structure as it appeared during the analysis of the two texts. Let us take for example the simplest and most common verbal structure: subject+ verb+direct object (he cut his finger). This structure, like the others

found in Hornby's publication, was written down on a card. If during text analysis the sentence "we lit a fire" occurs, an analogy to the same kind of structure can easily be drawn and, therefore, on the card mentioned above, the structure itself and the chapter in which it occurs in the texts being analysed will be noted.

At Annex 3 there is an example of a grammatical structure card where:

- on the first line, designated by the letter (a), the title of the selected structure is given (as it appears in the index of "A Guide to Patterns and Usage in English")
- on the second line (b) the paragraph number of the preceding publication is given indicating where the selected structure was found
- on the third, fourth, and fifth lines spaces are left for notes which would further facilitate ascertaining if a structure found in the analysis process of the two texts corresponds to the selected structure on the card
- on the sixth line (d) the structure pattern is written (for example: subject+verb+(pro)noun+present participle)
- on the seventh line (e) an example of the structure is given
- the boxes which appear under the headings D.L.I. (Defense Language Institute) and Shenker represent the chapters of the A.L.C. prepared by the D.L.I. and of the Shenker Method prepared by the Shenker Institute. The appearance of the structure in the two texts is noted in the box corresponding to the chapter in which it is found.

As the analysis of grammatical structures proceeded it was observed that the list of structures, compiled on the basis of the previously cited publication, was not complete. Therefore an attempt was made to integrate the list with structures found in other publications and particularly in the "Modern English Language Course" by M. Hazon. Naturally on the cards showing these structures, reference is made on the first two lines to the publications from which the structures are drawn.

The phase described above, the first and most difficult of the three phases of the project, is drawing to a close. The selection of vocabulary has been concluded, the preparation of the word lists to be used in con-

structing the items of the test for the three proficiency levels has begun. The selection of grammatical structures has not yet been terminated, but preparing lists of them will require less time than was needed for the vocabulary. This results from the smaller number of structural cards compared to the number of vocabulary cards and from the experience acquired in the practical methods to be followed in the application of the principles (frequency, difficulty) which regulate the list preparation.

The second phase (construction of the test) should begin in June. The third phase (codification of the evaluation scale) should be concluded by the end of the year. For the sake of further clarifying this project it may be noted that:

- the test will permit an exact evaluation of the candidate's ability to understand and to express himself in the written and spoken language (English)

- conferment of the various English language proficiency grades will depend on a certain score still to be determined. For example, the third grade of proficiency could be given to a candidate who scores from 90 to 100 points on the test.

The project, once completed, will meet all the requirements which made its carrying out advisable. In fact, the unfortunate confusion about the actual meaning of the English language proficiency grades will be reduced through:

- adoption by the Armed Forces of a common and fuller definition of English language proficiency grades (proficiency in the language in general and in the specific abilities cited above)

- administration of the same test

- "anchoring" of the (different) proficiency grades to a well defined lexical and structural body and also to a definite score received in the test.

It is hardly necessary to note that by taking advantage of the lexical and structural material which has been selected and graded, it will be

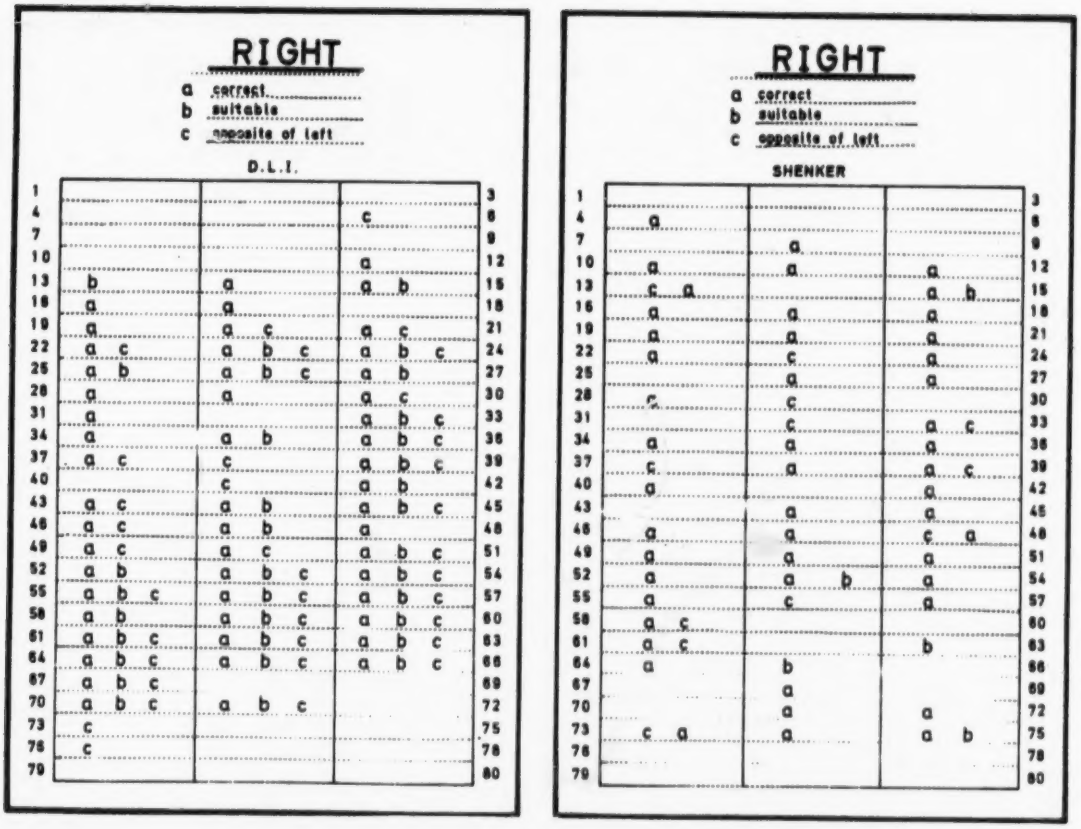
possible to construct other tests in the future keeping unchanged their degree of objective difficulty and the difficulties that the candidates in the Armed Forces must meet in order to pass the tests.

The work done so far constitutes a remarkable achievement of both a qualitative and quantitative nature. Qualitative, in view of the total absence of precedents in the field, even in civilian spheres; quantitative, in view of the great amount of material selected of which the preparation of 8.500 vocabulary and structure cards and the entering of 120.000 frequency and position notes is a clear proof. However, this work is well worth the efforts made. Suffice it to say that the analytical procedure described above has led to an exhaustive examination of the two texts being used, giving better results in linguistic training by perfecting the course material itself.

Furthermore, the above procedure, by making possible the unification of proficiency levels and English language tests in the Italian Armed Forces, could also represent a step towards a favourable solution of the same problem on the international scale.

ANNEX 1

VOCABULARY CARD



NOTES

The underlining indicates the presence of the term in the "General Service List of English Words" by Michael West.

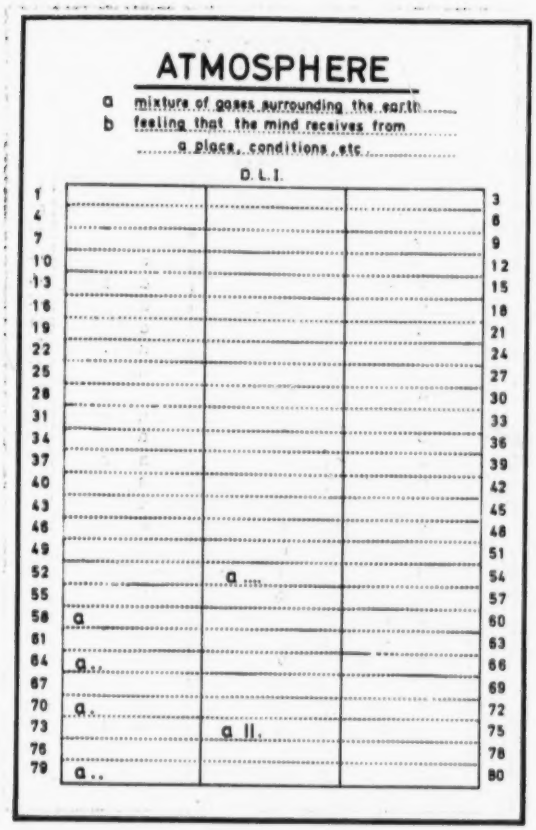
The colour identifies the word (white: noun; yellow: verb; red: adjective; grey: adverb).

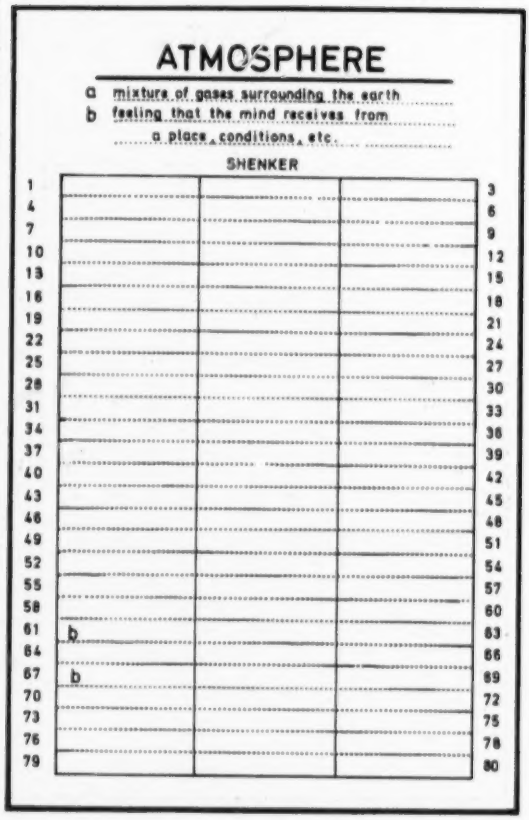
The letters a, b, c, correspond to the most common meanings of the word.

The boxes which appear under the headings D.L.I. and Shenker represent the chapters of the American Language Course, prepared by the D.L.I., and the Shenker Method, prepared by the Shenker Institute. The letters which appear in the boxes indicate the presence of the term and the meaning it has in the various chapters.

ANNEX 2

VOCABULARY CARD




ATMOSPHERE
a mixture of gases surrounding the earth
b feeling that the mind receives from a place, conditions, etc.
SHENKER

NOTES

The colour identifies the word (white: noun; yellow: verb; red: adjective; grey: adverb).

The letters a, b, c, correspond to the most common meanings of the word.

The boxes which appear under the headings D.L.I. and Shenker represent the chapters of the American Language Course, prepared by the D.L.I., and the Shenker Method, prepared by the Shenker Institute. The letters which appear in the boxes indicate the presence of the term and the meaning it has in the various chapters. The vertical lines and the dots indicate the frequency of use (one vertical line = 10 times; one dot = 1 time).

ANNEX 3

STRUCTURE CARD

a Verb Pattern 6

b § 17a

c Verbs indicating physical perceptions

d Subject+Verb+(Pro) noun+Present Participle

e I saw the thief running away

	D.L.I.	SHENKER	D.L.I.	SHENKER	
1					2
3					4
5					6
7					8
9					10
11					12
13					14
15					16
17		X	X	X	18
19	X				20

NOTES

1. On the first line (a) the title of the selected structure is given (as it appears in the index of the publication from which it has been drawn). When there is no indication of the publication it is understood that the structure has been taken from "A Guide to Patterns and Usage in English" by A. S. Hornby.

2. The second line (b) indicates the paragraph number of the publication in which the selected structure is found.

3. On the third line (c) notes are made which further facilitate ascertaining if a structure found in the analysis process of the two texts corresponds to the structure on the card.

4. On the sixth line (d) the structure pattern is written.

5. On the seventh line a meaningful example of the structure is given.

6. The boxes which appear under the headings D. L. I. and Shenker represent the chapters of the American Language Course prepared by the D.L.I., and the Shenker Method prepared by the Shenker Institute. The presence of the structure in the different chapters is indicated by an "x" in the corresponding boxes.

S o m m a i r e

Depuis longtemps on ressent la nécessité d'éliminer l'état d'incertitude qui s'est produit toutes les fois qu'il a été nécessaire d'examiner le degré de préparation linguistique du personnel militaire à destiner à des organisations internationales. Cette incertitude trouve son origine:

- dans le nombre différent des degrés de connaissance des langues étrangères adoptés dans les Forces Armées;
- dans la différence de définition de ces degrés, aussi bien sur le plan national que sur le plan international;
- dans le manque d'un "mètre unique", c'est-à-dire d'une épreuve d'examen qui soit égale pour tous.

Afin d'éliminer l'inconvénient en question, l'Etat-Major de la Défense a étudié le projet - en cours de réalisation - d'unifier les degrés de connaissance et des "tests" de langue anglaise (1) dans les 3 Forces Armées.

Le projet envisage:

- la reconnaissance de 4 degrés de connaissance linguistique (connaissance de 1er, 2ème, 3ème et 4ème degré), dont le contenu, en vue d'éviter les incertitudes qui se sont produites par le passé, a été précisé au moyen de:
  - la définition de la connaissance linguistique dans son ensemble (ex.: "bonne connaissance") et dans les 4 capacités dans lesquelles elle s'articule (de comprendre l'anglais parlé et écrit et de s'exprimer en anglais oralement et par écrit), exigée pour la reconnaissance de chaque degré de connaissance;
  - l'"ancrage" de chaque degré à la possession d'un patrimoine lexical et structural bien défini, ainsi que d'une note déterminée à remporter dans l'épreuve linguistique;

(1) On a prévu - comme réalisation future - l'unification de "tests" pour d'autres langues.

- l'élaboration d'un "test" à réaliser dans les trois phases suivantes:

  . 1ère phase:

    .. dépouillement et sélection du matériel linguistique (lexique et structures) contenu dans les divers textes adoptés dans les 3 Forces Armées;

    .. classement du matériel sélectionné selon une échelle de 3 degrés (correspondant aux 3 premiers degrés de connaissance) sur la base de la fréquence, pour le lexique; de la fréquence et de la difficulté (principe du contraste), pour les structures;

  . 2ème phase: construction du "test", avec l'utilisation du matériel linguistique trouvé et classé dans la 1ère phase;

  . 3ème phase: codification des règles d'évaluation.

Le projet se trouve maintenant dans une phase avancée de réalisation: la 1ère phase - de beaucoup la plus laborieuse - est presque terminée. On a raison de croire que la 3ème et dernière phase sera complétée avant la fin de l'année courante.

L'activité jusqu'ici décrite a présenté un gros engagement d'ordre qualitatif et quantitatif; qualitatif, à cause du manque absolu de précédents; quantitatif, à cause du laborieux travail de dépouillement, dont la préparation de 8.500 fiches et l'apposition sur elles de 120.000 annotations de fréquence en donnent la meilleure preuve.

Néanmoins elle:

- permettra de construire d'autres "tests" (avec l'utilisation du matériel lexical et structural trouvé) en maintenant inaltéré le degré de difficulté objectif;
- a mis en évidence les qualités et les défauts des textes adoptés, en créant les conditions pour de meilleurs résultats dans l'enseignement linguistique, à réaliser par le perfectionnement du matériel d'étude;
- constitue - en rendant possible l'unification dans les Forces Armées italiennes des degrés de connaissance et des "tests" de langue anglaise - un progrès vers une souhaitable solution de ce problème à l'échelle internationale.

U. S. A.

THE EFFECTIVENESS OF A CLASSROOM LAB INSTRUCTIONAL SYSTEM

by

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and

Boris Jordan, Chairman, Bulgarian Department, DLIWC

Introduction

Four years ago the authors reported[1] on an experiment which demonstrated and tested the significance of a Classroom Lab foreign language instructional system. This instructional system has been in operation now for over four years and a longitudinal evaluation of the system is thus possible. This report aims to render such an evaluation. The authors believe that an apparent lack of reports on long-term evaluation of foreign language instructional systems may underline the significance of this study.

The presentation will be structured in four parts:

- a brief review of the initial research;
- a report, analysis, and interpretation of the data;
- a comparative analysis of the pre-Classroom Lab program and Classroom Lab system;
- discussion of implications.

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1) Bela H. Banathy and Boris Jordan:"A Test of Significance of the Class-Laboratory", Journal of Secondary Education. February, 1964, Vol.39,No.2.

NOTE: This article is based on a paper submitted for later publication in a professional journal in the United States.

Review of the Initial Research

The initial report gave an account of two experiments which were conducted with two classes of the Bulgarian Department of the Defense Language Institute, West Coast Branch, during the years 1962 and 1963. The purpose of the experiments was to test the significance of an instructional system which was implemented through an interaction of specially designed learning experiences and a classroom laboratory electronic facility. This electronic facility, introduced into the regular classroom, allowed the student to listen and respond by means of earphones and microphone and be monitored and corrected by the instructor at a console. The console also served as tape program source.

It was hypothesized that the introduction of the learning system described above would make a significant difference in language proficiency. Two experiments were conducted sequentially in order to test the hypothesis. During the first experiment, ten students were divided into an experimental and a control group by equating the groups as to language aptitude and intelligence scores, age, and educational background. Both groups covered the same content during the same amount of time; - through six weeks of intensive, 180 hours of classroom instruction. For the experimental group, over half of the instructional material was prepared as semi-programmed exercises and was recorded and delivered through the electronic media. The rest of the program was regular class instruction. The control group had only regular class instruction and did not use the electronic media. For the daily individual home study, both groups used taperecorders.

At the end of the first experimental period, the same achievement test was administered to both groups; measuring comprehension, pronunciation competence, and grammatical correctness. An analysis of test results indicated that the difference in achievement was significant beyond the .05 level in favor of the experimental class.

The second experiment immediately followed the first. The experimental and control groups were merged into one class and subjected to an additional four and one-half months of instruction according to the Classroom Lab instructional system and received the same treatment as the experimental group did during the first experiment. At the end of the course,

a standardized proficiency test was administered to the class. Test results were compared to results of all the previous 13 classes who took the same proficiency test. It was found that, compared to all previous classes, the difference in achievement was significant beyond the .01 level in favor of the experimental class.

The experiment demonstrated that for the group involved in the use of the Classroom Lab instructional system, the use of the system did make a significant difference in achievement. This demonstration then led us to believe that the basic assumption entertained in the research hypothesis merited further exploration and testing. Therefore, it was decided to use the Classroom Lab instructional system for successive classes of the Bulgarian Department. Class-by-class proficiency test scores indicated achievement consistently higher than pre-Classroom Lab classes. Having the results of 15 more classes on record, we now believe it is timely to give a report on long-term findings.

An Analysis and Interpretation of Data

Data were accumulated on two populations. Classes of the Bulgarian Department graduated before the introduction of the Classroom Lab instructional system - between August, 1959 and September, 1963 - were considered as one group and labeled as the pre-Classroom Lab group. This group consisted of 13 classes totaling 87 students. Because of the lack of sufficient relevant data, classes graduated before August, 1959 were not considered.

Classes graduated after the introduction of Classroom Lab, between November, 1963 and July, 1967, were considered as the Classroom Lab group. This group consisted of 15 classes, totaling 103 students.

The two groups were compared first on the basis of the scores of the end-of-course test, called the Army Language Proficiency Test (ALPT) in Bulgarian. This is an objective type of standardized test, composed of two parts: listening-comprehension and reading-comprehension, each with 60 items. The information in Table 1 reports test results.

Table 1.

Comparison of Pre-Classroom Lab and Classroom Lab Classes

Based on ALPT Scores

	Mean Pre-Classroom Lab	Mean Classroom Lab	Standard Deviation Pre-Classroom Lab	Standard Deviation Classroom Lab	t	Level of Significance
ALPT-Listening	42.4	50.7	3.52	2.84	6.80	.0005
ALPT-Reading	40.9	45.5	3.72	3.13	3.51	.01

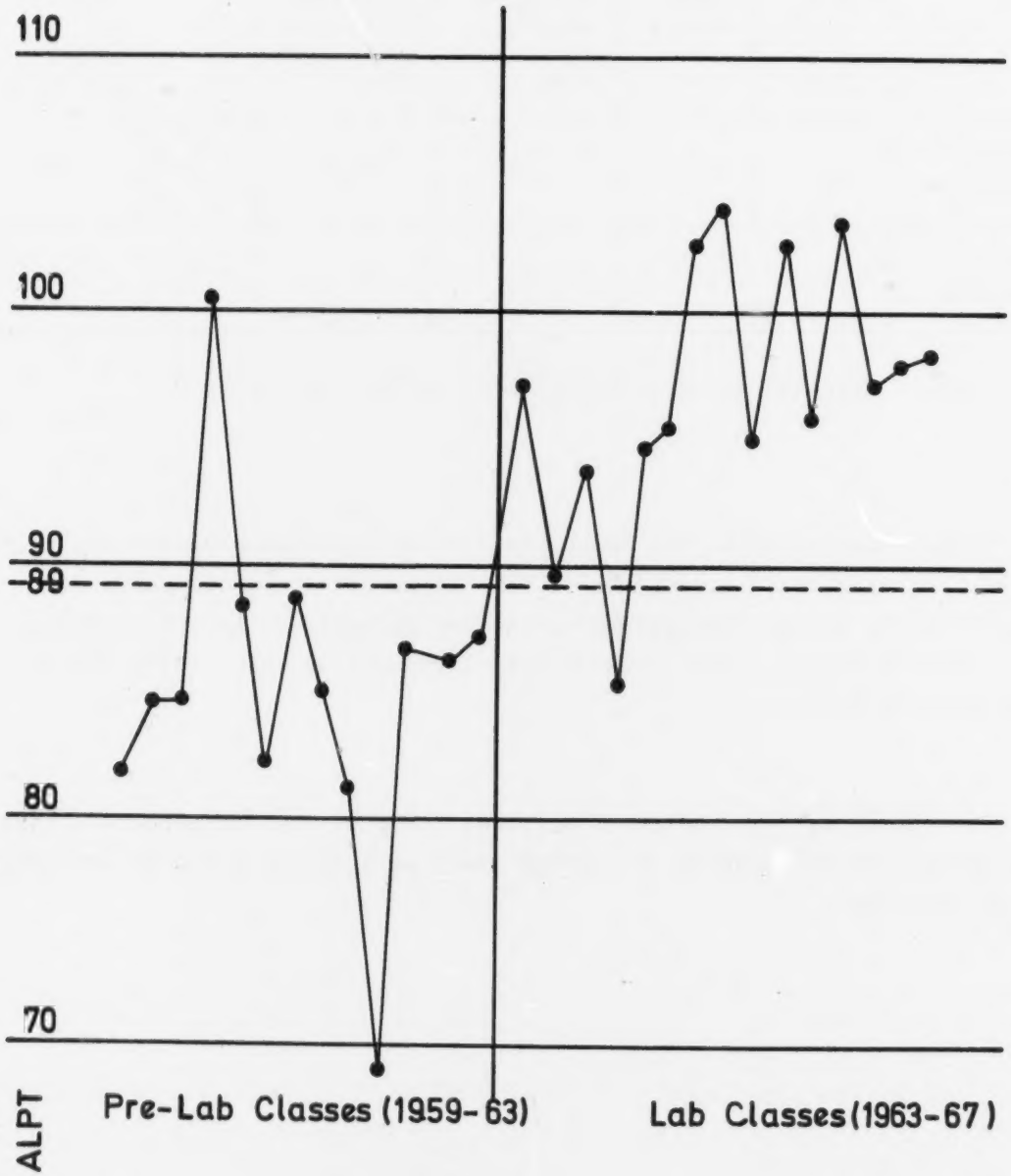
The highest possible score in both listening and reading is 60.

The information in the table above indicates that students who graduated following the introduction of the Classroom Lab system performed significantly better than pre-Classroom Lab graduates. The level of significance is beyond .0005 in listening comprehension, and beyond .01 in reading comprehension.

A visual representation of the comparison of the achievement of the two groups can be rendered by a graph which will be presented in the table which follows.

Table 2.

Mean ALPT Scores of Pre-Classroom Lab versus Classroom Lab Classes



Classes of the two groups are identified here by means of the ALPT scores (listening-reading combined) attained by members of pre-Classroom Lab and Classroom Lab classes. (The highest possible score is 120.) An analysis of the information in the diagram indicates that - considering the means of ALPT scores of each class - of the 13 classes of the pre-Classroom Lab group only one achieved higher than 89, and of the Classroom Lab classes, only one class achieved below this point.

In order to narrow down the number of possible reasons which could account for the significantly better performance of the Classroom Lab group, the two groups were compared on other available measures, such as the Army Language Aptitude Test (ALAT), age, and number of students in sections. ALAT is an artificial language test composed of 59 four-alternative, multiple-choice test items. If there was a difference in aptitude scores in favor of Classroom Lab classes, this should be taken into consideration in interpreting results. As to age, one can probably say that if students in the Classroom Lab group were much younger, this also should probably be taken into account. Finally, if the number of students in the pre-Classroom Lab sections was larger than in Classroom Lab sections, this might have had an influence on proficiency. These three variables are compared in Table 3.

Table 3.

Comparison of Pre-Classroom Lab and Classroom Lab Classes Based on Aptitude Test (ALAT), Age, and Size of Class

	Mean Pre-Classroom Lab	Mean Classroom Lab	Standard Deviation Pre-Classroom Lab	Standard Deviation Classroom Lab	t	Level of Significance
ALAT	31.7	30.7	5.94	4.65	.45	.60
AGE	24.1	24.3	3.15	4.88	.12	.80
SIZE OF CLASS	6.7	6.8	1.92	2.29	.12	.80

An examination of the data reported above indicates that students in the pre-Classroom Lab group had slightly better scores on the aptitude

test(ALAT), they were a fraction of a year younger, and the size of the pre-Classroom Lab sections was smaller. Although none of these differences are significant, still they seem to favor the pre-Classroom Lab group as predictors of achievement.

Reviewing the information presented in this section of the paper, the question now arises: What does an analysis of the data indicate? How can we interpret findings?

First, as measured by the end-of-course proficiency test, a significant difference was observed between the performance of students who graduated after the introduction of the Classroom Lab system and those who graduated before Classroom Lab. The proficiency test samples behavior on listening and reading comprehension. Although the difference was significant in both in favor of the Classroom Lab classes, it was outstandingly so in listening. The two groups were compared also as to aptitude, age, and size of sections. On these variables no significant difference was found. In fact, the negligible differences which were indicated favor the pre-Classroom Lab group.

The original research briefly reviewed in the first part of this paper demonstrated that the difference in the performance of the experimental and control groups - in favor of the experimental Classroom Lab group - was due to the differences in learning experiences which the two groups underwent.

As we continued to provide these learning experiences for classes which followed the original experience of four years ago, we have found that these classes - as measured by the final proficiency test (ALPT) - performed consistently higher than classes of the pre-Classroom Lab era. We have no reason to believe that this consistent difference in performance was due to anything else but to differences in the learning experience provided for the pre-Classroom Lab versus Classroom Lab classes.

In the next portion of the paper, therefore, we shall describe pre-Classroom Lab instruction and the Classroom Lab Instructional System, and we will analyze characteristic similarities and differences between these two.

A Comparative Analysis of the pre-Classroom Lab Program and Classroom Lab Instructional System[2)]

We propose to account for the difference in performance of the two groups by describing the programs of the pre-Classroom Lab and the Classroom Lab groups. First we will identify characteristic similarities between the two, and then present and analyze characteristic differences.

Characteristic Similarities

Aspects which appear to be common to both pre-Classroom Lab program and the Classroom Lab system include: (1) goals, (2) length of time and structure, (3) scheduling, and (4) language materials.

Goals of the Course. The graduate is expected: (a) to comprehend the language spoken at a normal rate of speed; (b) to participate effectively in all general conversation, to discuss particular interests with reasonable ease, and to possess a vocabulary broad enough that he rarely has to grope for a word; (c) to satisfy requirements within his special field. Although his accent may be obviously foreign, his control of grammar is good; his errors never interfere with understanding and rarely disturb the native speaker. He is also expected (d) to be able to read non-technical news items or technical writing in a specialized field; and to read articles directed to the general reader.[3)]

Length of Time and Structure. The course has a duration of 47 weeks of five school days per week, six classroom hours per day, three in the morning and three in the afternoon. In addition, the student is expected to study an average of three hours in the evening every school day.

[2)] We wish to point out that the terms used in the title: "Program" versus "Instructional System" were not selected arbitrarily. An instructional system can be viewed as a composite of a set of learning experiences having their own specific objective, but specifically designed to interact so as to serve a common purpose, and thus forming an integrated whole. It is believed that the definition given here will fit rather well the Classroom Lab system described here.

[3)] The above description is for the "three" level of proficiency (minimum professional proficiency) based on a scale of zero (no practical proficiency) to five (native or bilingual proficiency).

On the basis of the emphasis assigned to specific parts of the course, it is divided into three phases:

Initial Phase - with stress on pronunciation - six weeks.

Intermediate Phase - with stress on structure - 26 weeks.

Final Phase - with stress on practical utilization of the language and on the area background information - 15 weeks.

The Daily Schedule. The course material is organized into units which dictate the structure of the daily cycle. The high frequency pattern of this cycle is as follows:

Second period in the afternoon - Introduction of new language features with known vocabulary (insofar as possible).

Third period in the afternoon - Introduction of a new life situation, presented in a dialogue and a reading text. The students are given homework assignments, oral and written.

First period in the morning. Recitation of the dialogue, followed by guided conversation.

Second period in the morning. Pattern Practice containing the new structure and vocabulary recombined with the old ones.

Third period in the morning. Reading Text, followed by questions and answers based on the Reading Text.

First period in the afternoon. Free conversation based on the new and previous lessons; and/or a five-minute oral composition which each student has to offer on the basis of the materials covered thus far.

Language Material. The language material for both programs was the same. Nothing was changed, either in the sequence or in the quantity of the vocabulary and structure as presented in the Bulgarian Basic Course. The high frequency structure of the language is presented in 100 lessons containing a vocabulary of about three thousand words. This part of the course covers a period of seven to eight months. The Final Phase of the course, three to four months, is devoted to area background and specialized vocabulary and phraseology, and contains another 1,500 new words. This lexical inventory is considered to be active; i.e., each student is expected to use these words. In addition to this, another couple of thou-

sand words are contained in the listening and reading exercices, such as in broadcasts and reading assignments. These words are considered to be "passive" vocabulary.

Having described characteristic similarities, we will now present those aspects in which the two programs differ.

Characteristic Differences

Aspects in which the Classroom Lab Instructional System differs from the pre-Classroom Lab Program relate primarily to differences in learning experiences; more specifically to differences in the roles of components of the system, such as the (1) role of the media, (2) role of the teacher, and (3) the role of the student. These differences will be discussed next.

Differences in Learning Experiences. Our purpose here is to describe and analyze differences between the two programs which might have caused significant differences in the performance of graduates of the two programs. Learning experiences, of course, change throughout the course. A detailed description of learning experiences at different points of the course, however, would be out of place in this study which is limited by its nature of being an article. We thought the best approach to use here is to describe learning experiences which are typical to a daily unit during the intermediate or structural phase of the course, which is the longest and most formative of the three phases. In so doing, we will follow the sequence of the daily cycle. In order to enhance immediate comparison, we will juxtapose in parallel columns descriptions of the two kinds of programs.

Perception Drill (2nd Period in the Afternoon)

Pre-Classroom Lab	Classroom Lab
Brief introduction of the new structure on a Bulgarian-English contrastive basis. Approx. 10 min.	Brief introduction of the new structure on a Bulgarian-English contrastive basis. Approx. 10 min.
Oral Drill - conducted by the teacher - substitution and Q-A (Question-Answer) exercises of the new structure with known (insofar as possible) vocabulary. Approx. 40 min.	Oral Drill - conducted through the Classroom Lab - gradually structured repetition, substitution and transformation exercises of the new structure with known (insofar as possible) vocabulary. Approx. 40 min.
Individual student's active participation time: Approx. 5 min.	Individual student's active participation time: approx. 20 min.

Introduction of the New Life Situation
(Dialogue and Reading Text)
(3rd and last Period in the Afternoon)

Pre-Classroom Lab	Classroom Lab
The instructor recites individual exchanges and explains their content by acting, describing it in the target language, or translating unknown content. Once the content is understood, the instructor begins oral drill, individual or choral repetition to correct pronunciation mistakes and to create new production habits. (40 min.)	The instructor recites individual exchanges and explains their content by acting, describing it in the target language, or translating unknown content. Once the content is understood, the drill is continued by making use of the electronic media. The dialogue's utterances are segmented into small units for easier acquisition. The instructor monitors the individual student's pronunciation and corrects it if needed. Some problem students are given "live" drill without interfering with the lab practice of the other students.
Individual student's active participation time during this class period: approx. 3-4 min.	Individual student's active participation time during this class period: approx. 15 min.

Homework Assignment

Pre-Classroom Lab	Classroom Lab
Oral. Students are given a tape with the recorded dialogue which they are to memorize.	Oral. Students are given two tapes: one containing the dialogue to be memorized; the second, grammar drill exercises similar to those in the perception drill.
Written Assignment. Q-A exercises. Translation into the target language. Written substitution and transformation exercises.	Written Assignment. The students are to work out certain parts of the above-described exercises by performing the substitution and transformation changes in writing.

Note: The students' home study is not supervised by an instructor.

Student's Individual Performance
Recitation of the Dialogue
(1st Period in the Morning)

Pre-Classroom Lab	Classroom Lab
Warm-up Period. The instructor recites the dialogue and requires the student to repeat after him (individual and/or chorus repetition): 10 min.	Warm-up Period. Students respond while listening to the dialogue through the electronic facility. Instructor corrects individual mistakes through same. 10 min.

Pre-Classroom Lab	Classroom Lab
Students perform the dialogue in pairs. Instructor corrects mistakes. 30-40 min.	Students perform the dialogue in pairs. Instructor corrects individual mistakes. 30-40 min.
Individual student's participation time: 4-6 min.	Individual student's participation time: 15-18 min.
Time permitting, the instructor works on improving student's pronunciation.	Time permitting, the instructor works on improving student's pronunciation.

Pattern Drill
(2nd Period in the Morning)

Pre-Classroom Lab	Classroom Lab
The new structure introduced during the perception drill the previous day in the afternoon is now again practiced, this time containing the new vocabulary. The instructor corrects mistakes.	The new structure introduced during the perception drill the previous day in the afternoon is now again practiced, this time containing the new vocabulary. The drills, with pauses for student answers and reinforcements, are recorded. This is a 50-min. Classroom Lab session. Instructor corrects mistakes through the system or, if necessary, helps individual students directly.
Students' active participation: 6 min.	Students' active participation: 25 min.

Reading and Q & A Drill
(3rd Period in the Morning)

Pre-Classroom Lab	Classroom Lab
Individual students read short parts of the reading text. The instructor thereafter conducts Q-A drill or asks students to conduct it in turns. Sometimes this exercise assumes the form of directed dialogue.	The reading text is recorded at normal speed (in the earlier stages, below normal speed). Students, while listening to recording, are required to read the text simultaneously with it. Next a recorded pattern drill follows: a) questions inviting answers; b) answers with cued questions, usually recombinations of a) and b).
Individual student's active participation time: 3-6 min.	Individual student's active participation time: 25 min.

Free Conversation and Oral Composition

(1st Period in the Afternoon)

Pre-Classroom Lab | Classroom Lab

This activity remains the same in both programs. The teacher conducts free conversation which covers the salient points somewhat related in content and structure to the daily unit and preceding units.

His aim is to widen this activity into real life situations. This activity lasts for 10-15 minutes. After that, each student makes an oral composition for about 3-5 minutes.

Next, differences will be analyzed in terms of the roles of the components of pre-Classroom Lab and Classroom Lab. In this realm, changes in the roles of the media, of the teacher, and of the student will be discussed.

The Role of the Media. While textbooks and visual aids remained the same in both programs, audio aids - Classroom Lab - which were used in a limited way during the pre-Classroom Lab programs, were used intensively in the Classroom Lab system. Classroom Lab was utilized in almost all periods of the daily cycle. Its utilization was of varied duration: sometimes it covered a whole period, sometimes a fraction of it. The final results achieved by classes with intensive Classroom Lab utilization proved to be better than those of the classes which did not have these media. There are, of course, disadvantages as well as advantages inherent in the use of Classroom Lab, with the former apparently less significant than the advantages; otherwise the final results would have been at least insignificant, if not negative. Here both advantages as well as shortcomings will be discussed.

Advantages in the use of audio media are of several kinds.

First, there is an increased student participation. In the Classroom Lab system the frequency and intensity of active student participation are significantly higher. An actual count of active responses in pre-Classroom Lab and Classroom Lab activities of the same kind indicated 24 student responses in non-Classroom Lab as against 252 in the Classroom Lab environment during the same time period. If we add up the participation time during the first five hours of the daily cycle (the sixth hour does not show any difference in participation time in both programs), we find that during the pre-Classroom Lab program a student's active perticipation aver-

aged 21 minutes. During the Classroom Lab program, it was five times higher, some 103 minutes a day. The significantly longer participation seemed to be of great, if not of the greatest, importance. It has been observed that not all students participated actively in the production as required, at all times. They had, however, volens-nolens to listen to the materials, since they wore their earphones during the time. They cannot escape the audio signals as easily as they can when the teacher works with the whole class. This interpretation was well substantiated by test results, inasmuch as the performance of the Classroom Lab group on listening comprehension was outstandingly better than that of the pre-Classroom Lab group.

Second, another advantage is the intensity, consistency, and quantity of the language signals. Since Classroom Lab exercises are carefully planned, they eliminate several of the shortcomings inherent in conventional teaching. No matter how well prepared, the teacher needs time to read his prepared examples, sometimes even to invent ad hoc new examples, either because he has a new idea, or because he was asked a question by a student. These procedures are all time-consuming. They are largely eliminated from the Classroom Lab, which seems to satisfy any student with its constant reinforcement. Since the flow of the material is dictated by the recorded program, this kind of exercise usually is more intense than that presented by a teacher.

Reacting to students' answers, or being under the influence of his own mood and thinking, the average classroom teacher does not produce consistent signals, as consistent as those coming from the tape which is carefully prepared. Segmental and suprasegmental elements are more consistent on the tape. This cannot but favorably influence the student's understanding and production.

During a Classroom Lab exercise, no time is lost in hesitation or slowdown; more time is available and thus more language material is presented; i.e., quantitively students work more intensively in a Classroom Lab environment than they did in the pre-Classroom Lab program.

Thirdly, the isolation and concentration of the student are also advantages. With the earphones on, the student is almost completely isolated from his classmates. He is not subjected to listening to the errors of his fellow students, a condition which is inevitable in a class session con-

ducted directly by a teacher. Even if he remains idle, the student is continually exposed to the loud and insistent language signals of the native speaker.

Under the conditions of conventional teaching, even in a small class of eight students, the students very likely assume an inert attitude as soon as their turn is completed. This kind of pausing is eliminated under Classroom Lab conditions. A student's performance can be regarded as being more concentrated in a Classroom Lab than it is in the conventional classroom.

Disadvantages in the use of audio media are of two kinds.

First, the tempo, quality and quantity of the language material are the same for all students. This shortcoming can be eliminated by helping individual students and working with students on an individual basis during the Classroom Lab session - and also following the session.

Second, facial and body movements normally tied in with conversation are not displayed in Classroom Lab. These are, of course, continuously manifested by the teacher in the regular classroom. Kinesics seem to contribute to the student's ability to talk in the target language. To what extent the absence of kinesics during Classroom Lab practice influences the student's performance cannot be stated at this point. Inasmuch as the student works with recorded materials during only half of the daily program, during the other half he is in direct contact with the teacher. Three hours of live communication probably are enough to supply the student with the kinesic model.(This disadvantage of the Classroom Lab can be easily eliminated if the recording is integrated with a visual display of the speaker on a screen.)

The Role of the Teacher

In the pre-Classroom Lab type of program, the teacher plays an important role in introducing briefly the new structure, the dialogue and the reading material of each lesson. On the following day he checks the extent to which the students assimilated the material; he corrects their individual pronunciation and structural mistakes; and finally, during the last

period of the daily cycle, he leads them into practical application of the newly acquired structure. During the first two phases of the course, this performance covers on the average 40 % of the classroom time. The time taken up by the teacher significantly decreases during the last phase of the course when the students are engaged more in practical application of the language. The teacher's role then is mainly that of a moderator.

During Classroom Lab activity, the audio system frees the teacher of the burden of conducting all intensive drills (listening, production, and reading drills). He, however, remains in the classroom, listens through the system to the individual student's performance and corrects his mistakes. Most of the time this takes place through the media. The teacher can render extensive individual help to students who require such assistance. In some hard-to-correct cases, individual students are coached outside the classroom, an approach which was common also during the pre-Classroom Lab period. In addition, the teacher is asked - by observing the students' performance - to evaluate the effectiveness of materials used with the Classroom Lab, and to suggest improvement in the recorded materials. It is important to note that the same group of instructors participated throughout the period described in this report.

The Role of the Student can be inferred to a great extent from what we have said above in discussing the role of the media and of the teacher. Here we will sum it up. In the Classroom Lab Instructional System the student becomes more actively and more frequently involved; his participation factor increases, both in intensity and duration. His learning experiences become more concentrated and better organized. He may get more assistance from the teacher. Masked by the earphones, he is to make responses on his own; he is not subjected to a situation when, e.g., in response to a pattern practice cue, he would copy the response of one of his fellow students, rather than generating his own response. Furthermore, he is not influenced by the non-native utterances of others in the class which he cannot escape in a non-Classroom Lab setting.

Discussion of Implications

In this paper we have presented a report on a long-term study of the effectiveness of the Classroom Lab Instructional System. We commenced our discussion by briefly reviewing a research paper published some four years

ago in which the initial Classroom Lab experiment was reported. The finding was that students of the experimental Classroom Lab group performed significantly better than members of the control group. Following the initial experiment, the Classroom Lab Instructional System was used throughout four years and data were accumulated which were reported, analyzed, and interpreted in the second part of this article. The differences in performance between the pre-Classroom Lab and the Classroom Lab groups were found to be statistically significant. An exploration of reasons which may account for this significance led us to compare the program of the pre-Classroom Lab versus Classroom Lab groups. Characteristic similarities and differences were presented and analyzed in the third part of the paper.

Emerging from what we have described here as characteristic to the Classroom Lab Instructional System is a designed interaction of live instruction and different kinds of learning experiences which have made use of preprepared and recorded instructional materials, delivered through the classroom laboratory medium. This designed instruction constitutes an integrated whole directed toward the attainment of specific capabilities. In this program, components are used based on their measured potentials of contribution toward the facilitation of learning. It is for what has been described here that the Classroom Lab program is labeled an instructional system. In the pre-Classroom Lab program, learning experiences were to a great extent undefined; in the Classroom Lab system, it was predesigned. In pre-Classroom Lab, recorded materials were used to complement live instruction in the form of the homework or occasional language lab periods. In the Classroom Lab system, on the other hand, recorded exercises and the media were used whenever the learner reached the stage when he could best benefit from an intensive involvement of a Classroom Lab exercise. It is this planned and designed integration and fusion of the direct, teacher-pupil interaction and preprepared, recorded instruction in which the best of the Classroom Lab system is manifested.

We wish to emphasize here finally that without carefully prepared materials (software) and competent teachers, the electronic device (hardware) is of not much value. On the other hand, the efficiency of adequately prepared "software" can be much enhanced by a designed utilization of the "hardware" which definitely increases its potential for the facilitation of learning. It was thus the planned interaction of the various components

of the Classroom Lab Instructional System, such as the learner, teacher, media, textbooks, and visuals which, when directed toward their attainment of specific objectives and, when built into a designed system of instruction, significantly improved the performance of the learner.

In closing it is suggested that there are several aspects which invite further exploration. It is believed that the effectiveness of the Classroom Lab Instructional System can be further improved by a study of what we have called "designed interaction". We wish to explore the optimum timing of the use of recorded material and the optimum length of use. We suggest that there will be a shift of timing and length throughout the course. We would like to experiment with different types of drills during the daily cycle and at different points of the course. There is a need to test out whether the conditions of learning provided in the Classroom Lab environment do correspond to the differences in the kinds of learning involved in language acquisition. It would be also desirable to study the psychological effect - on students and teacher - of the use of the media. The use of visuals and of different kinds of electronic equipment could be also explored.

What we probably indicate here is that we have not yet fully arrived - there is a long way yet to go.

R E S U M E

En 1962 l'Institut de Langues du Ministère de la Défense (Defense Language Institute) des Etats-Unis mit sur pied deux expériences pour déterminer si un nouveau système d'utilisation d'un laboratoire de langues, faisant corps avec l'enseignement oral du professeur et non pas utilisé, comme à l'époque actuelle, uniquement pour les exercices en dehors de la salle de classe, pourrait amener à une amélioration des résultats.

Un premier rapport en fut publié en 1964, et en 1968 une deuxième étude des résultats prouve qu'une amélioration importante s'est produite et s'est toujours maintenue.

Ce nouveau système, dit "Classroom Laboratory", utilise des exercices et des textes enregistrés juste au moment où l'élève peut le plus profiter de l'effet d'un travail intensif de laboratoire. C'est donc une fusion, soigneusement conçue et préparée, de l'action réciproque directe entre l'élève et le professeur d'une part et l'enseignement préparé et enregistré de l'autre.

Sans une matière d'enseignement très soigneusement préparée, le matériel électronique à lui seul ne vaut pas grand'chose.

Reste toujours à savoir: Quel est le moment opportun pour utiliser des matières enregistrées, et quelle est la durée optimale de leur utilisation?

PROCES-VERBAL DE LA REUNION LINGUISTIQUE BILATERALE FRANCO-ALLEMANDE DU 13-2 AU 16-2-1967

I. CADRE DE LA REUNION

La réunion du 13 au 16 février 1967 s'inscrit dans le cadre de la coopération linguistique militaire bilatérale franco-allemande qui a été décidée par la Note 8907/EMA/REN du 3 décembre 1965, à la suite du Procès-verbal 5183/EMA/REN du 16 juillet 1965 et la Note Ministérielle allemande VR I 5 Az. 55-12-0210 du 6 octobre 1965.

Cette coopération bilatérale:

- A déjà donné lieu à plusieurs réunions de travail à PARIS (Centre de Langues et Etudes Etrangères Militaires) ou à Fontainebleau (Bureau Administratif Central (des Eléments) des Forces Fédérales en France) entre le Colonel CARRERE, commandant le Centre de Langues et Etudes Etrangères Militaires, et le Commandant HOFFMANN de l'Etat-Major des Armées/Renseignement d'une part et Monsieur MÜLLER, Représentant en France du Service des Langues de la Bundeswehr pour la coopération franco-allemande en matière linguistique d'autre part.

- A pris un premier essor à la suite de la visite faite - sur invitation du Ministre fédéral de la Défense allemand - par le Colonel CARRERE et le Commandant HOFFMANN au Service des Langues de la Bundeswehr dans un cadre bilatéral, en avril 1966, puis à l'occasion d'une réunion multilatérale en juin 1966. Au cours de ces deux visites, l'organisation, la structure et les différents domaines d'activité du Service des Langues de la Bundeswehr ont été présentés à la Délégation française aussi bien à BONN (Service Central) qu'à EUSKIRCHEN (Ecole

des Langues), MANNHEIM (Division Traduction et Interprétariat) et TREVES (Ordinateur électronique).

- S'est poursuivie par des conversations particulières bilatérales à l'occasion de la réunion linguistique multilatérale d'Eltham Palace en janvier dernier.

Sur invitation du Ministère des Armées, le Dr. SCHELLER a, du 13 au 16 février 1967, effectué une visite au Centre de Langues et Etudes Etrangères Militaires à Paris. La visite du Dr. SCHELLER (Conseiller Ministériel au Ministère de la Défense de la République Fédérale d'Allemagne et Directeur du Service des Langues de ce Ministère), initialement prévue pour novembre 1966, a été, pour des raisons d'emploi du temps, reportée à février 1967, moment où le Centre de Langues et Etudes Etrangères Militaires pouvait présenter un certain nombre d'activités concentrées donnant une physionomie générale de sa mission (Active, Contingent, Réserves).

Le Dr. SCHELLER était accompagné de trois de ses principaux collaborateurs:

- Monsieur BERNER, Adjoint du Dr. SCHELLER pour les questions de traduction, d'interprétariat et de terminologie.
- Monsieur LIECK, Directeur de l'Ecole des Langues de la Bundeswehr d'EUSKIRCHEN.
- Monsieur MÜLLER, du Bureau Administratif Central des Eléments des Forces Armées Fédérales Allemandes en France.

Cette visite, faisant suite aux réunions de travail précitées, avait quatre buts:

- Répondre à la visite du Colonel CARRERE et du Commandant HOFFMANN en Allemagne.

- Présenter les installations et activités du Centre de Langues et Etudes Etrangères Militaires comme avaient été présentées les installations et activités des Services de Langues allemands.

- Faire le point des résultats déjà obtenus dans le domaine de la coopération linguistique bilatérale franco-allemande.

- Proposer aux autorités supérieures un plan d'échange de services pour faire progresser cette coopération bilatérale.

II. ECHANGES DE DOCUMENTATION DEJA REALISES

cf. Annexe I.

III. PROGRAMME DE LA REUNION

cf. Annexe II.

IV. PRINCIPAUX POINTS TRAITES AU COURS DES VISITES ET DES REUNIONS

- Assisté à un cours de langue russe pour débutants, dispensé à de jeunes sous-officiers.
- Visite aux Laboratoires de Langues du Centre de Langues et Etudes Etrangères Militaires. Un exemple concret: une leçon "Audiomil" sur l'Armée espagnole.
- Visite de la Section d'Etudes Arabes.
- Un échange de vues a porté en particulier (à la demande de la Délégation allemande) sur le Corps des Officiers de Liaison Interprète de Réserve, son statut (décrets officiels), son mode de sélection et de recrutement, son instruction de perfectionnement.
- Assisté à une séance d'instruction des O.L.I.R. de la Ière Région Militaire (15 février 1967 - 21 h. 30 à 22 h. 15).
- Assisté aux cours de langue allemande des Certificats Militaires (14 février 1967 - 18 h. 30).
- Visite de la Section Glossaires Lexiques du C.L.E.E.M. - Echange de vues sur les questions de terminologie militaire, et de glossaires et lexiques militaires.
- Echanges de documents envisagés par les deux Services (cf. Annexe III).

V. ECHANGE DE PROFESSEURS, D'ELEVES ET DE TRADUCTEURS ENTRE LES DEUX PAYS

L'intérêt des échanges de professeurs, d'élèves et de traducteurs a été évoqué par les deux délégations. L'étude de ces échanges est plus avancée du côté allemand.

Les deux délégations sont tombées d'accord pour proposer d'entreprendre ces échanges le plus rapidement possible.

Les détails complémentaires de ces échanges doivent être mis au point lors de contacts entre les représentants désignés.

VI. La Délégation allemande exprime le désir que les versions française et allemande de ce Procès-verbal soient présentées ensemble et que cet ensemble fasse foi.

VII. CONCLUSION

Cette réunion a démontré l'utilité de la coopération bilatérale pour les deux pays; cette coopération bilatérale est une base essentielle de la coopération multilatérale.

Il serait particulièrement intéressant de publier dans le Bulletin du BILC, à titre d'exemple, les résultats de cette réunion.

Il est souhaitable de poursuivre de tels contacts, alternativement à PARIS et à FONTAINEBLEAU, grâce à des réunions bimestrielles des représentants désignés.

Le Dr. SCHELLER a tenu à souligner tout particulièrement l'intérêt de cette visite et des échanges de vues entre les deux pays, et à exprimer ses remerciements pour l'accueil, l'organisation de la visite et l'hospitalité de la Délégation française.

SUMMARY OF THE PROTOCOL

Franco-German Bilateral Linguistic Cooperation was established in 1965, and has already given rise to several working group meetings in PARIS (CLEEM) and at Fontainebleau (Central Administrative Department for German Forces in France).

The Federal German Defence Minister invited the Colonel Commandant of CLEEM to visit the Bundeswehr Language Service Installations in Germany in 1966; private bilateral conversations were held at the multilateral Language Conference in Eltham in January 1967; the Director of the German Language Service visited CLEEM in February 1967.

This latter meeting aimed, inter alia, at taking stock of results already obtained in the sphere of Franco-German bilateral linguistic cooperation, and to propose to higher authority a plan for the exchange of services, documents, teachers, students and translators in furtherance of this cooperation and as a basis for multilateral cooperation.

The contacts are to be continued alternately in Paris and Fontainebleau by meetings every two months between the nominated representatives of both nations.

A C K N O W L E D G E M E N T

The Director of Army Education of the British Army has recently produced and distributed the "English-German Military Dictionary" as a reprint of the "Handwörterbuch für die Bundeswehr - Englisch-Deutsch" which had been published by the Federal Minister of Defence, Bonn, in 1966. The "Handwörterbuch für die Bundeswehr" was compiled by the Languages Section of the Federal Ministry in close cooperation with the Languages Section of the Institute of Army Education in London and the Military Assistance Advisory Group, American Embassy, Bonn. This dictionary contains about 1,000 English key words which, with their derivatives and compounds, give access to approximately 5,200 military terms of the English language, offering roughly 16,000 German equivalent terms.

R E C O N N A I S S A N C E

Le Général, Directeur de l'Instruction dans l'Armée britannique, vient de faire distribuer sous le titre de "English-German Military Dictionary" le dictionnaire "Handwörterbuch für die Bundeswehr: Englisch-Deutsch", qui avait été publié en 1966 par le Ministre fédéral de la Défense à Bonn. Le "Handwörterbuch" avait été composé à son tour par le Service linguistique du Ministère fédéral en collaboration étroite avec le Bureau Langues de l'Institute of Army Education à Londres et le Military Assistance Advisory Group de l'Ambassade des Etats-Unis à Bonn.

Ce dictionnaire contient approximativement 1 000 mots-clés anglais qui, avec leurs dérivés et composés, donnent accès à quelque 5 200 termes militaires de langue anglaise, auxquels correspondent à peu près 16 000 expressions allemandes équivalentes.